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ABSTRACT

Contributing to current research in narrative comprehension, this booklet describes three steps in content analysis of texts: dividing text into content units, identifying the connections between each content unit, and classifying each content unit as central, supportive, or distracting. The first section of the report presents an overview of the materials covered, the second section discusses the procedure for dividing text into content units, and the third section outlines the method of identifying relationships. The fourth section examines additional complexities in identifying these relationships and the fifth describes the procedure for classifying content units. The sixth section discusses an additional step in content analysis--distinguishing between content subunits that describe the gist of an event or state or that further modify the content unit. The final section presents an extended example of the entire analysis. (MM)

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AN ANALYSIS OF NARRATIVES: SCORING MANUAL

1983/17

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Abstract

This paper describes, step-by-step, a procedure for analyzing the content structure of narratives. First, the events and states of a narrative, which roughly correspond to a clause and are called content units, are identified. Next, the componential, causal and purposeful relations judged to connect these events and states are identified. Finally, the events and states are classified as central, supportive, or distracting on the basis of these relations. In addition, a procedure for breaking content units into focus and non-focus subunits corresponding to Kintsch's propositions is described.

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AN ANALYSIS OF NARRATIVES: SCORING MANUAL

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1.0 INTRODUCTION

Research on narrative comprehension has benefited from structural descriptions of narrative content (e.g., Black & Bower, 1979; Kintsch, 1974; Mandler & Johnson, 1977; Meyer, 1975; Omanson, 1982a; Rumelhart, 1977; Stein & Glenn, 1979; Schank & Abelson, 1977; Thorndyke, 1977; Trabasso, Secco, & van den Broek, 1983; Warren, Nicholas, & Trabasso, 1979). The usefulness of a particular analyses depends greatly upon the task for which it is used. In educational settings in which questions and recall are used to assess children's understanding of a reading selection, it is particularly useful if an analysis has three features:

1. That content rather than story structure is described.
2. That the unit of analysis corresponds to the events and states portrayed by the story.
3. That the main events of a story that comprise the plot is identified.

It was with these three goals that the analysis presented by Omanson (1982a) was developed. Detailed comparisons between this analysis and

other analyses are discussed in Omanson (1979, 1982b).

The analysis described by this manual consists of three steps:

1. The text is divided into content units.
2. The relations connecting each content unit are identified.
3. Each content unit is classified as central, supportive or distracting.

These three components are described in detail in the subsequent four sections of this manual. In section 2, the procedure for dividing text into content units is described. In section 3, the basic procedure for identifying relations is outlined, while in section 4, additional complexities of identifying these relations are discussed. In section 5, the procedure for classifying content units as central, supportive and distracting is described. Section 6 describes a fourth step that was described in Omanson (1979), but not in Omanson (1982a). This step consists of breaking content units down into "a gist subunit that describes the gist of the event or state described by the content unit, and nongist subunits that further modify and describe it. Finally in section 7, an extended example of the entire analysis is provided. In sections 2 through 6, a step-by-step description, examples and practice items will be provided.

As with all analyses, the present analysis has its strengths and limitations. This analysis is designed to describe the content structure of action-based narratives such as those found in grade-school readers. It can comfortably describe stories with multiple characters, multiple plots, dialogue, and descriptive passages. It does not capture well the structure of stories lacking clear action-based plots or stream-of-consciousness descriptions. It is not applicable to expository

texts. Finally, since the analysis describes the structure of portrayed events and states, it can in principle be extended to narratives portrayed in other mediums such as pictures or television. However, this manual will not consider such extensions.

The analysis presented in this manual reflects more than three years of use and modification. Consequently it differs somewhat from the description given in Omanson (1982a). Major among these differences are:

1. The algorithm for identifying causal relations has been altered in light of work reported by Trabasso et al. (1983).

2. The way in which purposeful relations are recorded have been altered to simplify the algorithm used to classify content as central.

3. Classifying content units as focal, identifying or characterizing has been changed from a separate step to an aspect of identifying relations.

4. The manner in which content is classified as distracting has been redefined in terms of embedded episode structure in light of the work of Omanson and Malamut (Note 1).

5. The optional step of dividing content units into subunits has been added.

Although this manual is long and seemingly complex, the basic categories of narrative content it identifies are commonplace. It seeks to classify as central, story content corresponding to intuitive notions of plot, and to classify noncentral content as either supportive of, or distracting to, this plot. Inter-rater reliabilities of .91 and .90 for using this analysis to classify content as central, supportive and distracting have been reported by Beck, McKeown & Omanson, (1982) and Omanson (1982b) respectively. A number of studies (e.g., Beck et al, 1982; Beck, Perfetti, & McKeown, 1982; McKeown, Beck, Omanson, & Perfetti, 1983; Beck, Omanson, McKeown, & Pople, in press; Omanson,

1982a, 1982b) have found central content to be better recalled and rated as more important than noncentral content. The relative recall of supportive and distracting noncentral content, and its effects on central content are less well established (cf. Omanson & Malamut, Note 1). The distinction between gist and nongist subunits has received only informal empirical confirmation.

Finally, it is important to note that there are many situations in research and education where the central content of stories needs to be identified, but that a formal analysis is not needed. In these situations importance ratings or informal analyses are to be preferred. However, in other research and education situations, (e.g., constructing psychological models of comprehension) a more formal analysis of story content is needed. It is with these particular situations in mind that this analysis was developed.

2.0 DIVIDING THE TEXT INTO CONTENT UNITS

2.1 Definition Of Content Units

The first step in analyzing a narrative is to divide the text into content units. A content unit portrays a single event or state. Consider the following examples:

(1) Augustus was asleep in the houseboat.

(2) Augustus woke up.

(3) He opened the door.

(4) A big wave washed up.

(5) It was very stormy outside.

(6) Augustus was not a brave boy.

Each of these examples portrays a single event or state. As a result, each line contains a single content unit. In general, events refer to actions (e.g., walking, talking, thinking) and occurrences (e.g., falling objects, weather, movements of machines). States refer to stable character states (e.g., personality traits, physical traits, social roles), transitory character states (e.g., emotional states, desires, dress), and states of the environment (e.g., temperature, descriptions of objects). In the above examples, (1) portrays a transitory character state, (2) and (3) portray actions, (4) portrays an occurrence, (5) portrays an environmental state, and (6) portrays a stable character state.

2.2 Basic Rule For Identifying Content Units

The primary rule used to identify content units is that a content unit corresponds to a clause. Consider the following text:

> Augustus was asleep in the houseboat where he lived with his sister Gloriana. They were going down the Mississippi River in a houseboat. This night they had been asleep for some time when the houseboat tossed around so much that Augustus woke up. Augustus opened the door and looked outside.

This text would be broken into content units in the following manner:

(7) Augustus was asleep in the houseboat

(8) where he lived with his sister Gloriana.

(9) They were going down the Mississippi River in a houseboat.

(10) This night they had been asleep for some time

(11) when the houseboat tossed around so much

(12) that Augustus woke up.

(13) Augustus opened the door

(14) and looked outside.

Each of these units portrays a single event or state and consists of a clause. A simple rule for identifying a clause (and hence a content unit) is to look for the verb. This simple rule states that every verb describes a content unit. (There are several exceptions to this rule that will be discussed later).

As an exercise, divide the following text into content units by separating the content units with a slash (/). The first three are marked for you.

> Long ago in the middle of a deep, dark forest, there lived an Indian boy. / His name was Chipmunk. / One morning Chipmunk jumped out of his bed of furs / and ran to the doorway. His mother was cooking breakfast over a fire outside the door. She smiled at him.

The units that this section of text contain are:

(15) Long ago in the middle of a deep, dark forest, there lived an Indian boy.

(16) His name was Chipmunk.

(17) One morning Chipmunk jumped out of his bed of furs

(18) and ran to the doorway.

(19) His mother was cooking breakfast over a fire outside the door.

(20) She smiled at him.

2.3 Exceptions Due To Event And State Structure

There are two classes of exceptions to the simple rule that every verb portrays a content unit. The first class of exceptions is when a verb describes a component of an event or state.

2.3.1 Action Structure: Single Content - A single content unit can contain two verbs if one portrays an act of speaking, thinking or gesturing and the other portrays the content of that thought or speech. Consider the following examples:

(21) "This music is shrill!" exclaimed the fat lady.

(22) Sam decided to have a violin concert.

(23) The usher motioned for the spectator to be quiet.

In each of these examples, there is a content that contains two verbs. In (21), the act of speaking is portrayed by the verb, "exclaimed" and the state that is described by the speaking is portrayed by "is shrill". In (22), the act of thinking is portrayed by the verb "decided", while the content of this thought is portrayed by the verb "have". Finally in (23), the acting of gesturing is portrayed by the verb "motion" while the content expressed by this motioning is portrayed by the verb phrase "to be quiet".

As an exercise, divide the following passage into content units with a slash (/).

> Everything was very still until a rabbit ran down the road. "Someone is following us," said the first man. The little raccoon thought he would climb a tree because there he would be safe from danger.

The content units this passage contains are:

(24) Everything was very still

(25) until a rabbit ran down the road.

(26) "Someone is following us," said the first man.

(27) The little raccoon thought he would climb a tree

(28) because there he would be safe from danger.

It is not uncommon for content units portraying actions that portray content to contain three, four, or even five verbs. This occurs when the content of a character's speech or thought is itself speech or thought. Consider the following examples.

(29) Jack teased, "Billy is a baby."

(30) "Jack said that Billy was a baby," Jane complained.

(31) Jane decided to tell mother that Jack said that Billy was a baby.

Each of these examples is considered to be a single content unit. Example (29) portrays the action of teasing. The content expressed by this teasing is that Billy is a baby. Example (30) portrays the action of complaining. The content of the complaint is that Jack said something. The content of what Jack said is that Billy is a baby. Example (31) portrays the action of deciding. The content of Jane's deciding is to tell mother something. The content of what Jane will tell mother is that Jack said something. The content of what Jack said is that Billy is a baby.

2.3.2 Action Structure: Extended Content - Not all speech and thought, however, is portrayed by a single content unit. When speech and thought express multiple events, states or concepts that are not embedded, only the first expressed event, state or concept is considered to be part of the action's content unit. Each additional event, state, or concept expressed by the action forms a distinct content unit.

Consider the following paragraphs:

> "Scuffie," mother said, "I don't think you should read in bed so much. Look at your candle. It has dripped down on your bed."
>
> "I really should get up and get dressed," thought Scuffie to himself.

The content units contained in this passage are:

(32) "Scuffie," mother said, "I don't think you should read in bed so much.

(33) Look at your candle.

(34) It has dripped down on your bed."

(35) "I really should get up

(36) and get dressed," thought Scuffie to himself.

Here, mother's speech expresses three distinct events or states: (32) that Scuffie should not read in bed so much, (33) that he should look at his candle, and (34) that the candle has dripped on his bed. Each of these comprise a content unit. Scuffie's thought, in turn, expresses two events: (35) that he should get up and (36) get dressed. Each of these also comprise a content unit.

2.3.3 Action Structure: Purpose - A single content unit can contain two clauses if one portrays the action and the other portrays the aim or purpose of that action. Consider the following examples:

(37) She scrutinized the hall to see if there was any food.

(38) The campers shouted to scare the bear.

(39) He stood up to leave the table.

(40) To please her boss, the secretary arrived early.

In each of these examples, the non-underlined portion portrays an action and the underlined portion its purpose or aim. Grammatically, the purpose of actions is portrayed by clauses and phrases that are introduced by to. Notice that the purpose of actions is distinct from a desire that is portrayed as a desire or goal that exists apart from the action as shown in the following variations of the above examples:

(37)
a. She wanted to see if there was any food around,
b. so she scrutinized the hall.

(38)
a. The campers wanted the bear to leave,
b. so they shouted.

(39)
a. He wanted to leave the table,
b. so he stood up.

(40)
a. The secretary wanted to please her boss,
b. so she came in early.

In this and subsequent examples, the content units will be labeled with letters if more than one content unit is part of the example. The first content unit of each of these examples portrays a desire which prompts a subsequent action. The difference between (37-40) and (37-40) is that in

the first set, only a single event or state is portrayed in each example, while in the latter set, each example portrays two events or states. For example, scrutinizing the hall to see something describes only a single event, scrutinizing. Wanting to find food then scrutinizing the hall (41) describes a desire as existing prior to and distinct from the action of scrutinizing.

2.3.4 Transitory State Structure: Object - A single content unit can contain two clauses if one portrays a transitory state and the other the object of that state. Consider the following examples:

(41) Everyone liked the idea of taking over the kitchen.

(42) "I'm so glad it's time to eat."

(43) John wanted to play baseball.

(44) Hank intended for Sue to help him.

(45) Sam knew that only virtuosos should give concerts.

(46) Lulu was sure she blew it.

(47) George had a dream that he was the king of Gondor.

In each of these examples, the object of the transitory state has been underlined. Notice that transitory state can refer to preferences, as in (41), emotions as in (42), desires as in (43), plans as in (44), knowledge states as in (45) and (46) and altered state as in (47).

As an exercise, divide the following text into content units with a slash (/).

> Merry wanted someone to talk to, and he thought of Pippin. But that only increased his restlessness. Poor Pippin, shut up in the great city of stone. Merry wished he was a tall rider like Eomer and could blow a horn and go galloping to his rescue.

The content units contained in this passage are:

(48) Merry wanted someone to talk to,

(49) and he thought of Pippin.

(50) But that only increased his restlessness.

(51) Poor Pippin, shut up in the great city of stone.

(52) Merry wished he was a tall rider like Eomer

(53) and could blow a horn

(54) and go galloping to his rescue.

You may have noticed that this passage contained several "curve balls". Unit (51) portrays the content of Merry's thought, yet does not supply a verb denoting thinking. As can be seen from this example, portrayals of thinking does not have to include a verb describing the act of thinking. Also units (52-54) portray a wish with multiple objects. As can be seen from this example, multiple objects are treated in a similar fashion as thought or speech that expresses multiple events or concepts.

2.3.5 Stable State Structure: Range - A single content unit can contain two verb clauses if one describes some characteristic and the other describes the limits or conditions under which the characteristic is present.

Consider the following:

(55) Sam was a novice at playing the piano.

(56) "I'm a veteran at cooking."

(57) Matthew has the responsibility of closing the store at night.

(58) Sam is responsible for dealing with complaints.

In these examples the non-underlined portion portrays a trait or obligation and the underlined portion portrays the range of the trait or

obligation. In example (55), the trait of being a "novice" is portrayed and is limited to (i.e., has a range of) "playing the piano." In example (56), the trait of being a veteran is portrayed and is limited to cooking. Examples (57-58) portray obligations, limited to closing the store and dealing with complaints respectively.

2.3.6 Event Structure: Perception - Another instance in which a content unit can contain multiple verbs is when the perception of an event is portrayed. Consider the following:

(59) George saw that Sam was angry.

(60) Sally noticed that John was good with children.

(61) Sam could see the mouse hiding under the bed.

(62) Nobody heard the tree fall.

In each of these examples, the underlined portion of the content unit portrays the perception of the event portrayed in the remainder of the unit. Both the act of perceiving and the event perceived contain a verb, yet are contained within a single content unit.

As a review exercise divide the following paragraph into content units with a slash (/). The paragraph contains examples of the topics just discussed.

> Bob thought that the concert was boring. However, he saw that Joan was enjoying it. To please her, he sat quietly. As he shifted in his seat to get more comfortable, the chair made a loud squeak. He felt everyone staring at him and wanted to leave desperately.

The content units contained in this passage are:

(63) Bob thought that the concert was boring.

(64) However, he saw that Joan was enjoying it.

(65) In order to please her, he sat quietly.

(66) As he shifted in his seat to get more comfortable,

(67) the chair made a loud squeak.

(68) He felt everyone staring at him,

(69) and wanted to leave desperately.

2.4 Exceptions Due To Syntactic Complexity

The second class of exceptions to the rule that each content unit contains a single clause (verb) are due to certain syntactic constructions.

2.4.1 Clauses That Function As Nouns - The first way in which a content unit can contain more than one clause (verb) for syntactic reasons is when one of the clauses it contains functions as a noun (i.e. portrays a person, place, object, idea, or quality). Clauses that function as nouns do not form distinct content units.

Consider the following examples:

(70) Whoever cracked the window pane must pay for its replacement.

(71) What they were doing was wrong.

(72) Hand me what you have.

(73) Singing in the shower is very relaxing.

Each of these sentences contains two clauses yet portrays a single content unit. This is because one of the clauses in each example, which has been underlined, functions as a noun. In (70) the clause "Whoever cracked the window pane" identifies who must pay. In (71) "What they were doing"

describes what was wrong. In (72) "what you have" describes what was requested. In (73) "singing in the shower" describes what is relaxing.

Clauses that function as nouns often begin with "what, that, who, whoever, whomever, whatever and which, or end in "-ing." They often can be replaced with a simple noun. For example in sentence (70) the clause "whoever cracked the window pane" can be replaced with a simple noun such as "Bill" without the sentence losing its meaning. A clause that functions as a noun cannot stand alone as a main clause because it does not express a complete thought.

As an exercise divide the following paragraph into content units by separating the content units with a slash (/)

> The Chop family had a big party. The family gave whoever came a warmest welcome. A clown was performing in the living room, doing whatever he felt like. What he was going to do next could never be guessed.

The paragraph would be divided into content units as follows:

(74) The Chop family had a big party.

(75) The family gave whoever came a warm welcome.

(76) A clown was performing in the living room,

(77) doing whatever he felt like.

(78) What ever he was going to do next could never be guessed.

2.4.2 Clauses That Identify Nouns. - A content unit can contain more than one clause or verb when one of its clauses or verb phrases restrict the identity of a noun. These clauses and verb phrases, which are called restrictive, do not form distinct content units. Consider the following examples:

(79) The record that Margaret brought is bad.

(80) This is the molar whose pain makes the child shriek.

(81) Matilda likes vanilla ice cream topped with syrup.

(82) The woman gave the lad shoveling her walk a dollar.

Examples (79-82) each contain two verb phrases or clauses yet consist of only a single content unit. This is because the underlined clause or verb phrases in each of these examples is restrictive. These restrictive phrases identify which record, which molar, what kind of ice cream and which lad is being discussed. In each case, the underlined phrases identifies the preceding noun.

In contrast to the above examples containing restrictive clauses, the following examples contain nonrestrictive clauses, each of which portrays a distinct content unit:

(83)
a. The old raft ... was finally hooked and dragged ashore.
b. which had been submerged for over a month

(84)
a. The elderly neighbor,...finally called the police.
b. who had been irritated too long by trespassers,

(85)
a. Rowing across Lake Placid,
b. I viewed the surrounding Mountains.

(86)
a. The quarterback, ... flopped to the ground.
b. surrounded by three linesmen,

The reason examples (83-86) each portray two content units is that the modifying clause, which has been underlined, assumes the identity of the noun it modifies has already been established. Thus the modifying clauses in (83-86), tell the reader something additional about the nouns

rather than establishing their identity.

Restrictive clauses and verb phrases are often introduced by the pronouns whose, whom or that. They cannot be omitted without changing the meaning of the sentence and therefore should not set off from the sentence by commas as nonrestrictive clauses and phrases should.

As an exercise, divide the following paragraph into content units with a slash (/). Embedded content units can be circled.

> Martha and Rose, who were sisters, loved to do things together. They often went swimming in the pond that belonged to Mr Day. Often, they took a lunch that mother packed and picnicked in the park. Everyone knew them as the girls who were always together.

The paragraph should be divided as follows.

(87) Martha and Rose ... loved to do things together.

(88) who were sisters

(89) they often went swimming in the pond that belonged to Mr. Day.

(90) Often, they took a lunch that mother packed

(91) and picnicked in the park.

(92) Everyone knew them as the girls who were always together.

2.4.3 Compound Predicates - Not only are there content units that contain multiple clauses or verb phrases, but there are also clauses that contain multiple content units.

One instance in which a clause can contain multiple content units is when a clause contains a compound verb phrase. Consider the following examples:

(93)
a. One day Sam rented a big music hall
b. and invited many people to hear him play.

(94)
a. When the usher saw what she was doing
b. he flexed his arm
c. and thrust her into a corner.

(95) I have a tree that grows and grows.

Example (93) contains a compound verb phrase "rented . . . and invited." As a result this example contains two content units. Example (94) also contains a compound verb phrase "flexed . . . and thrust". This sentence contains three content units. The first unit (a) describes the usher's perception of the lady's actions. The next two units describe his actions of flexing his arm , (b) and thrusting the lady, (c). Example (95) also contains a compound predicate, yet portrays only a single content unit. This is because whenever a verb is repeated in such a way that it is an idiom for a single verb, only a single content unit is identified.

2.4.4 Compound Complements - A second instance in which a clause can contain multiple content units is when it contains a compound verb phrase complement. Verb phrase complement refers to the words in the clause that are not the subject or verb. Compound complements that portray multiple events, states, or concepts are classified as a distinct content unit. Consider the following:

(96)
a. Jack went to the store
b. and the gas station.

(97)

a. John gave bread to the geese
b. and corn to the squirrels.

(98) Mary gave bread and corn to the ducks.

All of these examples contain compound complements. Example (96) contains two content units because two actions (going to the store and going to the gas station) are portrayed. Notice that in (b), both the subject, "Jack", and the verb, "went" are implied rather that stated. Similarly example (97) contains two content units because two events, giving bread to the geese and giving corn to the squirrels, are portrayed. Example (98), on the other hand, contains only a single content unit because giving bread and corn is portrayed as as single event directed toward the ducks. Thus, sentences with a compound complement form multiple content units <u>if</u> they are judged as portraying multiple event states.

As a review exercise divide the following paragraph into content units with a slash (/). This exercise includes examples of the topics discussed.

> Whoever wins the trip to Italy will have a great time. They will spend eight days and seven nights there. They will visit many famous places and have a chance to observe Italian customs. With the $50,000 that is part of the prize, they will be able to sample much of the Italian cuisine.

The content units contained in this passage are:

(99) Whoever wins the trip to Italy will have a great time.

(100) They will spend eight day and seven night there.

(101) They will visit many famous places

(102) and have a chance to observe Italian customs.

(103) With the $50,000 that is part of the prize, they will be able to sample much of the Italian cuisine.

3.0 IDENTIFYING RELATIONS: BASIC PROCEDURE

After the text has been divided into content units, the relations connecting the events or states (hereafter called event/states) they portray are identified. Five types of relations are identified:

1. Componential
2. Purposeful
3. Causal
4. Disruptive
5. Enabling

To identify these relations, six questions are asked about each event/state portrayed by the content units. These questions, in the order they should be asked, are:

1.	Missing Event/State:	Does this event/state imply a missing event/state?
2.	Componential relations:	Is this event/state a component of another event/state?
3.	Causal relation:	Are there prior event/states that caused this event/state?
4.	Purposeful relation.	Is there a prior action that was performed in order to bring about this event/state?
5.	Disruptive relation:	Did this event/state cause a prior action to "fail"?
6.	Enabling relation:	Is this event/state enabled by a prior event/state?

In order to make learning these questions easier, we will describe the content of these questions in the order of causal relations, purposeful relations, disruptive relations, enabling relations, componential relations and missing event/states.

3.1 Causal Relations

Often, two event/states are connected by causal relations. Consider the following example:

(104)

a. "You took Henry's food!" the cook cried.
b. The old man became angry.
c. He stood up to leave
d. and a loaf of bread fell out of his pocket.

In this example, the cook's accusation (a) and the old man's getting angry (b) are connected by a causal relation. A causal relation also connects the cook's accusation (a) and the old man's standing up (c). Finally the old man's standing up (c) and the bread falling out, (d) are connected by a causal relation. In general a causal relation connects an event/state with a prior event/state that is judged to be responsible for it. When two event/states are connected by a causal relation, the prior event/state is called the cause of the subsequent event/state.

To identify the causal relations connecting the content units in example (104), the causal question stated above is asked for each unit as follows:

(104)

a. Are there prior event/states that caused the cook to accuse the old man of stealing the food? No.

b. Are there prior event/states that caused the old man to become angry? Yes, the cook's accusation(a).

c. Are there prior event/states that caused the old man to get up? Yes, the cook's accusation (a).

d. Are there prior event/states that caused the food to drop out? Yes, the old man's standing up (c).

If a cause of an event/state is given in the text, the number (in this case, letter) of the unit containing the cause is entered in a column labeled "C" (for Cause). If no cause of an event/state is given, a dash is entered in that unit's cause column. This has been done for example 104 below:

(104)		C
a.	"You took Henry's food!" the cook cried.	-
b.	The old man became angry.	a
c.	He stood up to leave	a
d.	and a loaf of bread fell out of his pocket.	c

Causal relations come in three varieties:

1. Physical
2. Motivational
3. Psychological

There is no need to keep track of the type of causal relation that exists. These types are mentioned here merely as an aid to recognizing the variety of situations in which causal relations exist. A physical causal relation exists when an event/state is judged as physically and mechanically producing a subsequent event/state. In (104), the old man's standing (c) physically caused the bread to fall (d). A motivational causal relation exists when an event/state is judged as prompting a character to perform a voluntary action. In (104), the cook's accusation (a) motivationally

caused (prompted) the old man to stand up (c). A psychological causal relation exists if the psychological significance of an event/state is judged as causing an involuntary event/state involving a character. In (104), the cook's accusation (c) psychologically caused the old man to get angry (b). In most cases, the causes of event/state are easy to identify. For those cases that are not obvious an additional question can be asked: "If the prior event had not occurred, would the subsequent event have occurred? If not, the prior event is probably a cause of the subsequent event.

As an exercise, identify the causal relations in the following units:

(105)

a. Mrs. Gabby was hungry,
b. so she stopped at the Whole Donut for a bite to eat.
c. When her bus came by,
d. she ran out to catch it.

The causal relations you should have identified are as follows:

(105)

a.	Mrs. Gabby was hungry,	C
b.	so she stopped at the Whole Donut for a bite to eat.	a
c.	When her bus came by,	-
d.	she ran out to catch it.	c

3.2 Purposeful Relations

Very often event/states are also connected by purposeful relations. Consider the following example:

(106)

a. John went to the hardware store
b. and bought some clippers.
c. Later, he used them to clip his bushes.

In this example, John's going to the store (a) is connected to buying clippers (b) by a purposeful relation. This is because John goes to the

store in order to buy the clippers. John's buying the clippers, in turn, is connected to clipping his bushes (c) by a purposeful relation. This is because John buys the clippers in order to clip his bushes. Thus, a purposeful relation is an "in order to" relation that connects a voluntary action to a subsequent event/state. The purpose of an action refers to the subsequent event/state that the action brings about.

In order to identify purposeful relations, one asks for each action "Was a prior action performed in order to bring about this event/state? If there is, the number (or letter) of the prior action is entered in a column labeled "P" (for Purpose) of the queried event/state it brought about. This has been done for example (106) below:

(106)		P
a.	John went to the hardware store	-
b.	and bought some clippers.	a
c.	Later, he used them to clip his bushes.	b

The purposeful relations in example (106) were identified by answering the purposeful question as follows:

(106)

a. Was a prior action performed in order to go to the store (a)? No, so no entry is made.

b. Was a prior action performed in order to buy some clippers (b)? Yes, John went to the store (a) to buy the clippers (b). So an "a" is entered in unit (b)'s purpose column.

c. Was a prior action performed in order to clip the bushes? Yes, John bought the clippers (b) in order to clip the bushes (c). So a "b" is entered in unit (c)'s purpose column.

As can be seen from this example, it is not necessary for a character to verbalize a goal in order to identify a purposeful relation. In general, purposeful relations exist whenever an action:

1. Is responsible for a subsequent event/state.
2. Is judged to be intentional rather than accidental; and
3. Produces an event/state that is not surprising or unexpected to the character.

As an exercise, identify the purposeful relations of the following example:

(107)

a. The dragon went to his book shelf,
b. and started to read by the fire place.
c. Abruptly he was interrupted by a knock.
d. He went outside
e. and found that Jerimiah frog had come for a visit.

The purposeful relations you should have identified are as follows:

(107)		P
a.	The dragon went to his book shelf,	-
b.	and started to read by the fire place.	a
c.	Abruptly he was interrupted by a knock.	-
d.	He went outside	-
e.	and found that Jerimiah frog had come for a visit.	d

3.3 Disruptive Relations

Often actions are interrupted or have purposes that fail. Consider the following example:

(108)

a. Jack reached for the apple
b. and fell out of the tree.

Here, Jack tries to get an apple (a) but fails because he falls out of the tree (b). Thus Jack's falling (b) is connected to Jack's reaching for an apple (a) by a disruptive relation because his falling disrupted his reaching (i.e., caused it to fail). In order to identify disruptive relations, one asks: "Did this event/state disrupt a prior action, or cause its purpose to fail? If it did, the number (or letter) of those event/states are entered in the disruptive (D) column of the queried unit. This has been done for example (108) below:

(108)	D
a. Jack reached for the apple	-
b. and fell out of the tree.	a

The disruptive relations in example (108) were identified by answering the disruptive question as follows:

(108)

a. Did Jack's reaching disrupt a prior action. No, so a dash is entered in unit (a)'s disruption column.

b. Did falling out of the tree disrupt a prior action? Yes, falling out of the tree (b) disrupted Jack's reaching (a). So an "a" is entered in unit (b)'s disruption column.

As an exercise, identify the disruptive relations contained in the following example:

(109)

a. Scooter threw the football across the street.
b. Henry positioned himself in front of the ball
c. only to watch it fly into the window of a passing car.

The disruptive relations you should have identified are as follows:

(109)	D
a. Scooter threw the football across the street.	-
b. Henry positioned himself in front of the ball	-
c. only to watch it fly into the window of a passing car.	a,b

3.4 Enabling Relations

Often an event or state is enabled by a prior event or state. Consider the following example:

(110)

a. The camp counselor was walking outside
b. when he heard shouting from the dining hall.
c. The counselor ran into the hall
d. and was hit on the head by a flying pot.

In this example the counselor's walking (a) and hearing the shouting (b) are connected by an enabling relation. Running into the hall (c) and getting hit on the head (d) are also connected by an enabling relation. In general an enabling relation exists whenever a prior event/state makes it possible for a character to perceive, experience or perform a subsequent event/state. If two event/states are connected by either a causal or purposeful relation an enabling relation is not identified.

In order to identify enabling relations, one asks "Are there prior event/states that enabled the current event/state to occur or exist?" If there are, the number (or letter) of the prior event/states are entered in a column labeled "E" (for Enable) of the queried unit. This has been done for example (110) below:

(110)		E
a.	The camp counselor was walking outside	-
b.	when he heard shouting from the dining hall.	a
c.	The counselor ran into the hall	-
d.	and was hit on the head by a flying pot.	c

The enabling relations in example (110), were identified by answering the enabling question as follows:

(110)

a. Are there prior event/states that enabled the counselor to walk outside? No, so a dash is placed in unit (a)'s enable column.

b. Are there prior event/states that enabled the counselor to hear the shouting? Yes, walking outside enabled the counselor to hear the shouting. Therefore an "a" is entered in the enable column of unit (b).

c. Are there prior event/states that enabled the counselor to run into the hall? No, so a dash is placed in unit (c)'s enable column.

d. Are there prior event/states that enabled this event/state? Yes, walking into the hall (c) enabled him to get hit. Therefore a "c" is placed in the enable column of unit (d).

As an exercise, identify the enabling relations contained in the following example.

(111)

a. Sam stepped out on the porch
b. and saw a bird with a broken wing.
c. As he stepped out into the yard
d. and picked up the bird,
e. the wind blew water from the trees on him.

The results of your responses to the enabling questions should have been as follows:

(111)		E
a.	Sam stepped out on the porch	-
b.	and saw a bird with a broken wing.	a
c.	As he stepped out in the yard	-
d.	and picked up the bird,	-

e. the wind blew water from the trees on him. c

(Note: the reason (c) and (d) are not connected by an enabling relation is because a purposeful relation exists between them.)

3.5 Componential Relations

Very often events are portrayed that are composed of other events and states. Consider the following examples:

(112)
a. Horace was busy making breakfast.
b. Horace picked out his favorite cereal
c. and poured some in a bowl with some fruit and milk.

(113)
a. John walked through the woods,
b. and crossed the old pasture.
c. Then he went down the road into town.

(114)
a. Mary looked all over for Tom
b. Mary checked at the office
c. and called all of Tom's favorite bars.
d. Then she walked through the park.

(115)
a. "When I grow up," said Linus,
b. "I want to be outrageously happy."

For rather different reasons, each of these examples contain complex events. Example (112) portrays a typical sequence. The overall or summary event of this typical sequence is that of making breakfast (a). Picking out cereal (b) and pouring it in a bowl (c) are components of this summary event. Thus making breakfast (a) is connected to picking out

cereal (b) and to pouring milk (c) by a componential relation. That is, picking out the cereal and pouring milk are components of making breakfast. In general, components of a typical sequence:

1. Enable each other
2. Are performed in a single setting
3. Can be summarized as a single event

In addition to scripted actions such as that portrayed in example (112), typical sequences include intended physically caused events and verbal acknowledgements that accompany compliance to a command. Additionally, turning around, looking up, walking along, sitting or standing and then hearing or seeing an event form typical sequences of perceiving an event.

In order to identify componential relations such as those in typical sequences one asks: "Is this event/state a component of a summary event/state?" If it is, the number (or letter) of the summary event/state is entered in a column labeled "M" (for coMponential) of the component event/state. Thus in order to identify the componential relations of example (112) the following questions would be asked:

(112)

a. Is making breakfast a component of a summary event/state? No, so a dash is entered in unit (a)'s component (M) column.

b. Is picking out cereal a component of a summary? Yes, picking out cereal (b) is a component of making breakfast (a). So an "a" is entered in unit (b)'s component column.

c. Is pouring cereal in a bowl a component of a summary event/state? Yes, pouring cereal in a bowl is a component of making breakfast. So "a" is entered in unit (c)'s component column.

Example (113) portrays an ongoing event. The summary event is the destination, that is, going to town (c). Going through the woods (a) and crossing the pasture (b) are components of going to town (c). In general ongoing events portray different phases of the same event. In addition to different phases of a journey such as is portrayed in example (113), ongoing events include resuming an interrupted activity, and physically caused consequences of an ongoing event and redescriptions of an event by the author.

Example (114) portrays a generalizable sequence. The summary event is looking for Tom (a). Checking at the office (b), calling the bars (c) and walking through the park (d) are all components of looking for Tom. In general, generalizable sequences can be summarized by abstracting across characters, actions, or locations. In example (114) Mary's actions of checking, calling and walking can be "abstracted" (i.e. summarized) as looking. The locations of the office, the bars and the park can be abstracted as "all over". If Jane and Hilda had also been looking, the characters could have been abstracted as "the women".

Example (115) portrays extended dialogue. These two unit of Linus' speech are connected by a componential relation. The method used to identify the summary event of extended dialogue (or extended thought) is described in section (3.1.4) below.

As an exercise, identify the componential relations in the following example. It is not necessary to differentiate among the different types of componential relations. As with causal relations, the different types of componential relations have been described only to give you an idea of the range of relations that are considered to be componential.

(116)

a. Henry grabbed the football,
b. tucked it under his arm,
c. and ran down the street
d. until he came to Scooter's house.
e. Come on out Scooter, Henry yelled.
f. All right, Scooter mumbled
g. as he stumbled outside.
h. The boys hopped on their bikes
i. and hit the town for food.
j. They went to Joe's Diner.
k. Then they stopped at Hoggy's Pizzeria.
l. Finally they finished their appetites at Slush-O-Rama.

The relations you should have identified are as follows:

(116)		M
a.	Henry grabbed the football,	-
b.	tucked it under his arm,	a
c.	and ran down the street	d
d.	until he came to Scooter's house.	-
e.	Come on out Scooter, Henry yelled.	-
f.	All right, Scooter mumbled	g
g.	as he stumbled outside.	-
h.	The boys hopped on their bikes	-
i.	and hit the town for food.	-
j.	They went to Joe's Diner.	i
k.	Then they stopped at Hoggy's Pizzeria.	i
l.	Finally they finished their appetites at Slush-O-Rama.	i

Notice that units (a) and (b) form a typical sequence summarized by grabbing the football, while units (c) and (d) portray the "on going" event of going to Scooter's house. Units (a) and (b) are <u>not</u> considered part of going to Scooter's house because they are performed in a different setting. Units (f) and (g) portray a typical sequence complying with Henry's request. Units (i),(j),(k) and (l) form the generalizable sequence of hitting the town for food.

3.6 Missing Event/States

Sometimes the text implies the existence of an event/state that is not directly stated. In certain circumstances when this occurs, a missing event/state is identified. Specifically, missing event/states are identified in three situations:

1. Missing setting transitions.
2. Missing causes.
3. Missing summary event/states.

Each of these types will be considered in turn.

3.6.1 Missing Setting Transitions - The first type of missing event/states are those due to missing setting transitions. Consider the following example:

(117)
a. John noticed he was out of bread.
b. At the store, he bought some bread.

Here John notices that he is out of bread. Then abruptly buys some bread in a store. The action of going to the store is not specified and hence is supplied by the analysis as a missing event/state. In general, when an action is performed in a new setting, but how the character got there is not specified, a missing event/state of going to the new setting is identified.

In order to identify a missing event/state, one asks for each unit, "Does this event/state imply a missing event/state?" missing event/states are then indicated in the analysis by inserting a new line enclosed in brackets. Thus for the above example, the answers to this question would be as follows:

(117)

a. Does John's noticing he was out of bread imply a missing event/state? No, so no entry is made.

b. Does buying bread imply a missing event/state? Yes, John bought bread at the store, but going to the store is not specified, so the missing event/state [John went to the store] is inserted prior to this unit.

The results of these questions are given below:

(117)
a. John noticed he was out of bread.
b. [John went to the store.]
c. At the store, he bought some bread.

There are three exceptions to the rule that abrupt changes in setting result in missing event/state. The first exception is when the new setting is the setting in which the character first appears. The second exception is when a temporal gap exists between the setting changes. The third exception is when an intended action summarizes the Missing event/state. In order to see these, consider the following examples:

(118)
a. It was very cold in London.
b. In his bedroom, in Wales, however, Sam was very warm.

(119)
a. Sam played very hard in the racketball court.
b. The next day at home, he slept all day long.

(120)
a. Jack decided to go to the beach.
b. He got sunburned there.

In all three of these examples, no missing event/states should have been identified. Notice that although example (118) has an abrupt setting

change, no missing event/state is identified. This is because the second setting is the first setting that involves Sam. Similarly, no missing event/state is identified in example (119). This is because there is a temporal gap between the two settings. Finally, in example (120), the intended action functions in the place of an action describing actually going to the beach.

3.6.2 Missing Causes - A second common type of missing event/states are those due to missing physical or psychological causes. To see this, identify the missing event/state contained in the following examples:

(121)

a. John was at bat
b. when Mrs. Wilson's window was broken.

(122)

a. Sue and George walked through the forest.
b. Suddenly George screamed.

The answers to the missing event/state questions should have been as follows:

(121)

a. Does John being at bat imply a Missing Event/State? No, so nothing is done.

b. Does the window breaking imply a missing event/state? Yes, because it is an event that typically is physically caused by something yet no cause is given. Thus a likely cause [The ball was hit through Mrs. Wilson's window.] is inserted.

(122)

a. Does walking through the woods imply a missing event/state? No, so no entry is made.

b. Does screaming imply a missing event/state? Yes, because screaming is an event that typically is psychologically caused (i.e., is involuntary). Thus a likely cause, [George was scared by something] is inserted.

The results of these questions are given below:

(121)
a. John was at bat.
b. when [the ball was hit through Mrs. Wilson's window]
c. (and) broke Mrs. Wilson's window.

(122)
a. George and Sue were walking through the woods.
b. [Something scared George.]
c. Suddenly George screamed.

In the above examples, the type of cause missing was either a physical or psychological cause. If a motivational cause of a voluntary action is missing, a missing event/state is <u>not</u> identified. Consider the following example:

(123)
a. Jack walked into the room
b. and punched Sam in the nose.

Here even though no cause of Jack's opening the door to punch Sam in the nose is given, a missing event/state is not identified. This is because punching is a voluntary action.

3.6.3 Missing Intended Actions - The third type of common missing event/states are those due to missing intended summary events. Consider the following example:

(124)
a. George played the washtub,
b. Mother played the fiddle,
c. and Mary sang her little heart out
d. as father proudly conducted.

Here there is a complex event, (specifically a generalizable sequence) that might be summarized as "The whole family performed." However, none of the component events express this. Therefore, the summary event is identified as a missing event/state. In general, whenever there exists a generalizable sequence that does not contain a component event that can be used as a summary event, an appropriate summary event is identified as a missing event/state. This has been done for the preceding example below:

(124)
a. [The whole family performed.]
b. George played the washtub
c. Mother played the fiddle
d. and Mary sang her heart out
e. as father proudly conducted.

As an exercise, identify the missing event/states in the following examples:

(125)
a. Michelle seasoned the stuffing.
b. While cooking, the stuffing oozed out of the turkey.
c. Michelle was proud to serve the delicious meal.

(126)

a. Sarah choose a flat piece of wood.
b. She sanded it,
c. and varnished it,
d. then nailed it to the all ready assembled legs.

The following missing event/states should have been identified:

(125)

a. Michelle seasoned the stuffing.
b. [She placed the stuffing in the turkey]
c. While cooking, the stuffing oozed out of the bird.
d. [Michelle prepared a meal]
e. Michelle was proud to serve the delicious meal.

(126)

a. Sarah choose a flat piece of wood.
b. She sanded it,
c. and varnished it,
d. they nailed it to the already assembled legs.
e. [Sarah made a table]

3.7 Putting It All Together

You have now been introduced to the five types of relations identified by this analysis. It is now time to describe the manner in which the relation questions are asked. It is often not necessary to ask each question of every unit. Instead the following algorithm is used:

1. First, the missing event question is asked.

2. Next, the componential question in asked. If the queried unit is a component of another unit, it is recorded, dashes are entered in the unit's remaining columns, and the algorithm is continued with the next unit at step #1.

3. If a componential relation is not identified, the purposeful relation question is asked. If the queried unit is connected to prior units by a purposeful relation, it is recorded, dashes are entered in the unit's remaining columns, and the algorithm is continued with the next unit at step # 1.

4. If a purposeful relation is not identified, the causal and disruptive relation questions are asked. If the queried unit is connected to subsequent units by either causal or disruptive relations, it is recorded, a dash is entered in the unit's enable column, and the algorithm is continued with the next unit at step #1.

5. If no causal or disruptive relations are identified, the enabling question is asked. If the queried unit is connected to prior unit, it is recorded. Otherwise, a dash is entered. In both cases, the algorithm is continued with the next unit at step # 1.

As an exercise, identify the relations in the following passage using the algorithm outlined above.

(127)

a. Homer and Ben decided to go to the pond.
b. There they cut some logs,
c. and built a raft.
d. When they finished the raft
e. they boarded it,
f. and floated out to the middle of the pond.
g. After they had drifted for a while,
h. they went to shore.
i. Then using their lunch as bait
j. they began to fish.
k. They caught two bullheads,
l. and cooked the fish at home.

Your responses should have been as follows:

(127)

UNIT	TEXT	M	P	C	D	E
a.	Homer and Ben decided to go to the pond.	-	-	-	-	-
b.	There they cut some logs,	c	-	-	-	-
c.	so they built a raft.	-	a	-	-	-
d.	When they finished the raft	c	-	-	-	-
e.	they boarded it,	f	-	-	-	-
f.	and floated out to the middle of the pond.	-	c	-	-	-
g.	After they had drifted for a while,	f	-	-	-	-
h.	they went to shore.	-	-	f	-	-
i.	Using their lunch as bait,	j	-	-	-	-
j.	they began to fish.	-	h	-	-	-
k.	They caught two bullheads,	-	j	-	-	-
m-l.	[The boys went home.]	-	k	-	-	-
l.	and cooked the fish at home.	-	ml	-	-	-

The relations identified in (127) were identified by answering the relational questions as follows:

(127)

a. Does deciding to go to the pond imply a missing event/state? No. It does imply the action of going to the pond, but since unit (a) expresses the intention to perform this action, no missing event/state is identified.

   Is deciding to go to the pond a component of a summary event/state? No, so a dash is entered in unit (a)'s component column. Is there a prior action that was performed in order to go to the pond? No, so a dash is entered in unit (a)'s purpose column.

   Is deciding to go to the pond caused by a prior event/state? No, so a dash is entered in unit (a)'s cause column. Does deciding to go to the pond disrupt a prior event/state? No, so a dash is entered in unit (a)'s disrupted column.

   Is deciding to go to the pond enabled by a prior event/state? No, so a dash is entered in unit (a)'s enable column, and we move on to unit (b).

b. Does cutting some logs imply a missing event/state? No, so no unit is added.

   Is cutting some logs a component of a summary event/state? Yes, it is a component of building a raft (c). So a "c" is entered in unit (b)'s component column, dashes are entered in the remaining columns, and we go on to the next unit.

c. Does building a raft imply a missing event/state? No, so no unit is added.

   Is building a raft a component of a summary event/state? No, so a dash is entered in unit (c)'s component column.

   Is there a prior action that was performed in order to build the raft? Yes, going to the pond (a). So an "a" is entered in unit (c)'s purpose column, dashes are entered in the remaining columns, and we move on to the next unit.

d. Does finishing the raft imply a missing event/state? No, so no unit is added.

   Is finishing the raft a component of a summary event/state? Yes, it is a component of building the raft (c). So a "c" is entered in unit (d)'s component column. Dashes are entered in the remaining columns and we move on to the next unit.

e. Does boarding the raft imply a missing event/state? No, so no unit is added.

Is boarding the raft a component of a summary event/state? Yes, it is a component of floating in the pond (f). So an "f" is entered in unit (e)'s component column. Dashes are entered in the remaining columns and we move on to the next unit.

f. Does floating in the pond imply a missing event/state? No, so no unit is added.

Is floating in the pond a component of a summary event/state? No, so a dash is entered in unit (f)'s component column.

Is there a prior action that was performed in order to float in the pond? Yes, the boys built the raft (c) in order to float in the pond (f). So a "c" is entered in unit (f)'s purpose column. Dashes are entered in the remaining columns and we move on to the next unit.

g. Does drifting around imply a missing event/state? No, so no unit is added.

Is drifting around a component of a summary event/state? Yes, it is a component of floating on the pond (f). So a "f" is entered in unit (g)'s component column. Dashes are entered in the remaining columns and we move on to the next unit.

h. Does going to shore imply a missing event/state? No, so no unit is added.

Is going to shore a component of a summary event/state? No, so a dash is entered in unit (h)'s component column.

Is there a prior action that was performed in order to go to shore? No, so a dash is entered in units (h)'s purpose column.

Are there prior event/states that cause the boys to go to shore? Yes, floating in the middle of the pond (f) [technically the completion of this action] prompted the boys to go to shore (h). So an "f" is entered in unit (h)'s cause column.

Are there prior event/states that are disrupted by the boy's fishing? No, so a dash is entered in unit (h)'s disruption column. Since an entry was made in unit (h)'s cause column, a dash is entered in the enable column and we move on to the next unit.

i. Does using their lunch as bait imply a missing event/state? No, so no unit is identified.

Is using their lunch as bait a component of a missing event/state? Yes, it is a component of fishing (j). So a "j" is entered in unit (i)'s component column. Dashes are entered in the remaining columns and we move on to the next unit.

j. Does fishing imply a missing event/state? No, so no unit is identified.

Is fishing a component of a summary event/state? No, so a dash is entered in unit (j)'s component column.

Is there a prior action that was performed in order to fish? Yes, the boys went to shore (h) in order to fish (j). So an "h" is entered in unit (j)'s purpose column. Dashes are entered in the remaining columns and we move on to the next unit.

k. Does catching two bullheads imply a missing event/state? No, so no unit is identified.

Is catching two bullheads a component of a summary event/state? No, so a dash is entered in unit (k)'s component column.

Is there a prior action that was performed in order to catch the bullheads? Yes, the boys fished (j) to catch the bullheads (k). So a "j" is entered in unit (k)'s purpose column. Dashes are entered in the remaining columns and we move on to the next unit.

l. Does cooking the fish at home imply a missing event/state? Yes, it implies that they went home. So unit [m-1], "the boys went home" is identified, and the algorithm begins again with this new unit.

Does going home imply a missing event/state? No, so no unit is identified.

m-1. Is going home a component of a summary event/state? No, so a dash is entered in unit (m-1)'s component column.

Is there a prior action that was performed in order to go home? Yes, the boys caught the fish (k) in order to go home (m-1). So a "k" is entered in unit (m-1)'s purpose column. Dashes are entered in the remaining columns and the algorithm picks up where it left off with unit (1).

Is cooking the fish a component of a summary event/state? No, so a dash is entered in unit (1)'s component column.

Is there a prior action that was performed in order to cook the fish? Yes, the boys went home (m-1) in order to cook the fish (1). So an "m-1" is entered in unit (1)'s purpose column. Dashes are entered in the remaining columns and the algorithm is completed.

4.0 IDENTIFYING RELATIONS: COMPLEXITIES

You have now completed the "basics" in identifying relations. In this section, common complexities that are often encountered will be described.

4.1 Complexities Of Thought And Speech

4.1.1 Perceived Event/States - Sometimes event/states are portrayed through character speech or thought. To see this, identify the causal relations in the following example:

(128)

a. Soon it was time to eat.
b. But when Henry picked up his fork,
c. he gaped at his plate
d. and said, "Someone has filched my dinner."

Your responses to the causal questions should have been as follows:

(128)

a. Are there prior event/states that caused it to be time to eat? No, so a dash should be entered in unit (a)'s "cause" column.

b. Are there prior event/states that prompted Henry to pick up his fork? Yes, being time to eat (a) caused it. Consequently an "a" is put in unit (b)'s "cause" column.

c. Are there prior event/states that caused Henry to gape at his plate? Yes, the absence of his dinner, which is not portrayed directly, but rather is described by the content of Henry's speech (d) caused it. Consequently, a "d" is put in unit (c)'s "cause" column.

d. Are there prior event/states that caused Henry to exclaim that his dinner had been filched? Yes, the absence of his dinner, which is described by the content of Henry's speech (d) caused it. Consequently, a "d" is put in the "cause" column of unit (d). Thus event/states that are portrayed only in the content of character speech (or thought) can be causes of other event/states.

4.1.2 Queries About An Event - When two characters perceive an event and one immediately queries about the event, both the event and the question are the cause of the response. To see this, identify the causal relations in the following:

(129)

a. A stone rolled down the hill.
b. "What was that?" he asked.
c. "Just a rock." the other replied.

Your responses to the causal questions should have been as follows:

(129)

a. Are there prior event/states that caused the stone to roll down the hill? No, so a dash is entered in the cause column of content unit (a).

b. Are there prior events/states that prompted the man to ask a question? Yes, the rock falling (a) caused it. So an "a" is entered in the cause column of content unit (b).

c. Are there prior event/states that prompted the other man to reply? Yes, the first man's questioning (b) and the rock falling (a) caused it. So an "a" and a "b" is entered in the cause column of content unit (c). Notice that both the event (a) and the question (b) are both causes of answering (c).

4.1.3 Character Paraphrases - Often a character will describe an event that has already been described by the text. In these instances, the character's description (paraphrase) is not considered to be a cause. To see this, identify the causal relations in the following example:

(130)

a. There was a raccoon in the tree.
b. "Look there is a raccoon!", the men said.
c. They ran from him.

Your responses to the causal questions should have been as follows:

(130)

a. Are there prior event/states that caused the raccoon to be in the tree? No, so a dash is entered in the cause column of unit (a).

b. Are there prior event/states that caused the man to exclaim that there was a raccoon in the tree? Yes, the raccoon's presence in the tree caused it. Therefore an "a" is placed in the cause column of unit (b).

c. Are there prior event/states that caused the men to run from the raccoon? Yes, the raccoon's presence in the tree caused it. Therefore an "a" is placed in unit c's cause column. Unit (b) is not the cause of their running because it is a redescription of unit (a).

There is one exception to the rule that character paraphrases of the text are not considered causes. Often a character will describe an event that has already been described by the text but will do so inaccurately. In this case either the text description or the character paraphrase can be a cause of a subsequent action. To see this, identify the causal relations in the following example:

(131)

a. There was a raccoon in the tree.
b. "Look there is a bandit in the tree," said the men.
c. They ran from him.

Your responses should have been as follows:

(131)

a. Are there prior event/states that caused the raccoon to be in the tree? No, so a dash is placed in the cause column of unit (a).

b. Are there prior event/states that prompted the men to say that there was a bandit in the tree? Yes, the raccoon being in the tree (a) caused it. Therefore an "a" is placed in the cause column of unit (b).

c. Are there prior event/states that prompted the men to run away? Yes, their misconception that there is a bandit in the tree (b) caused it. Therefore a "b" is placed in cause column of unit (c). Here the character description (b) is identified as the cause because it differs from the text's description of the same event (a).

4.1.4 Extended Dialogue - When an overt behavior consists of a summary action and component actions, typically only the summary action is a cause of subsequent event/states. In contrast to this any component of extended speech or thought can be a cause of subsequent event/states. To see this, identify the componential and causal relations in the following example:

(132)

a. Jill boasted to the newcomer, "Our neighborhood is so safe
b. that we are not even going to lock up our silver
c. when we leave for vacation next week."
d. The next week, the newcomer stole their silver.

Your responses to the causal questions should be as follows:

(132)

a. Is boasting that the neighborhood is safe a component of another event/state? Perhaps. Looking ahead, we notice that units a, b and c are all part of an extended dialogue. Therefore, one of these units will be the summary event and the remaining two, components of that summary event. In order to decide which unit will be the summary unit, the units that are causes of subsequent units must first be decided. Thus we skip down to unit (d).

c. Is the newcomer's stealing a component of another event/state? No, so a dash should be put in the component column of unit (d). Are there prior event/states that caused this event/state? Yes, hearing that Jill was going away (c) and leaving her silver unlocked (b), prompted it. So "b" and "c" are entered in the cause column of unit (d). Notice that all the units contained in the extended dialogue were candidates for causing subsequent unit (d). Units (b) and (c) were both selected because of the judgment that if either of them had been omitted, the newcomer would not have been prompted to break into the house. In contrast, had unit (a) been omitted, the newcomer still would have been prompted to break in. Having identified which units of the extended dialogue caused subsequent event/states, we can decide which of these units will be designated the summary event. The rule is that the first unit of extended thought or speech that causes a subsequent event/state is selected as the summary event. Thus, unit (b) is the summary event of the extended dialogue (a-c). At this point, we can go back and finish the analysis of these units.

a. Is boasting that the neighborhood is safe a component of another event/state? Yes, it is a component of boasting that Jill isn't going to hide her silver (b). So a "b" is entered in unit (a)'s component column and consequently a dash is entered in unit (a)'s cause column.

b. Is boasting that the silver will be left out a component of a summary event/state? No, so a dash is entered in unit (b)'s component column. Are there prior event/states that caused Jill to boast that she was going to leave her silver out? No, so a dash is entered in unit (b)'s cause column.

c. Is mentioning that Jill is going on vacation a component of a summary event/state? Yes, it is a component of boasting that Jill isn't going to hide her silver (b). So a "b" is entered in unit (c)'s component column and consequently a dash is entered in unit (c)'s cause column.

4.2 Complexities Of Peculiar States

4.2.1 Emotions - Emotions are a common type of character state that are seldom causes of events. To see this, identify the causal relations in the following example:

(133)
a. Jane stomped on Billy's sand castle.
b. Billy got angry
c. and hit Jane.

Your responses to the causal questions should have been as follows:

(133)

a. Are there prior event/states that caused Jane to stomp on the sand castle? No, so a dash is put in unit (a)'s cause column.

b. Are there prior event/states that caused Billy to become angry? Yes, Jane's stomping of the sand castles (a) caused it. Thus an "a" is put in unit (b)'s cause column.

c. Are there prior event/states that caused Billy to hit Jane? Yes, Jane's stomping of the sand castle caused it. Billy's anger is not the cause of his hitting Jane, because Billy's hitting response is directed at the cause of his anger: Jane. Billy's anger merely accompanies this hitting response rather than causing it. Thus, an "a" is entered in the cause column of unit (c).

In general whenever an event causes an emotion, the event, and not the emotion, is the cause of the behavioral response. There are, however, two exceptions to the general rule that emotions are not causes of subsequent event/states. The first is when the action subsequent to the emotion does not involve the cause of the emotion. To see this, identify the causal relations in the following example:

(134)

a. Jane stomped on Billy's sand castle
b. Billy got angry
c. and later pushed Francis for no good reason.

Your responses to the causal questions should have been as follows:

(134)

a. Are there prior event/states that caused Jane to stomp on the castle? No, so a dash should be entered in unit (a)'s cause column.

b. Are there prior event/states that caused Billy to get angry? Yes, Jane's stomping of the castle (a) caused it. So, an "a" should be placed in unit (b)'s cause column.

c. Are there prior event/states that caused Billy to push Francis? Yes, Billy's angry state (b) caused it. Thus, a "b" is entered in unit (c)'s cause column. In this example Billy's anger is a cause because it prompts a subsequent action (pushing Francis) that does not involve the cause of the emotion (Jane's stomping).

The second exception to the rule that emotions do not cause subsequent events is when the cause of an enduring emotion is not specified. To see this, identify the causal relations of the following example:

(135)

a. Billy had been depressed for days.
b. He sat down by himself.

Your responses should have been as follows:

(135)

a. Are there prior event/states that caused Billy to become depressed? No, so a dash is entered in the cause column of unit (a).

b. Are there prior event/states that caused Billy sit down by himself? Yes, Billy's depression caused him to sit by himself, so an "a" is entered in the cause column of unit (b). Here we do not know what made Billy depressed, so the only candidate for the cause of Billy's sitting is his depression. Notice that this rule applies only to enduring emotions. Had a more typical, transitory emotion been portrayed, a missing event/state would have been identified as the cause.

4.2.2 Character Habits And Traits. - When a character reacts to an event in a peculiar way that is explainable by a trait or habit, both the trait (habit) and the event are considered to be causes. To see this, identify the causal relationships in the following example:

(136)
a. John was mean.
b. He saw a dog
c. and kicked it.

Your responses to the causal questions should have been as follows:

(136)

a. Are there prior event/states that caused John to be mean? No, so a dash is entered in the cause column of unit (a).

b. Are there prior event/states that caused John to see the dog? No, so a dash is entered in the cause column of unit (b).

c. Are there prior event/states that caused John to kick the dog? Yes, his being mean (a) and seeing the dog (b) prompt him to kick it. So both an "a" and a "b" are entered in the cause column of unit (c). Here, seeing the dog would not be a sufficient reason for kicking the dog without the trait of being mean, so both are identified as causes.

4.2.3 Environmental States - Waiting for environmental states to return to a normal or previous state, (e.g., waiting for night, waiting for someone to return or leave.) can be a cause. To see this, identify the causal relations in the following examples:

(137)
a. It stopped raining,
b. so Joan mowed the lawn.

Your responses to the causal questions should have been as follows:

(137)

a. Are there prior event/states that caused it to stop raining? No, so a dash is entered in the cause column of unit (a).

b. Are there prior event/states that caused Joan to mow the lawn? Yes, the fact that it has stopped raining (an environmental state returning to normal) prompted it. Therefore an "a" is entered in the cause column of unit (b).

4.3 Complexities Of Event Sequences

A cause that occurs prior to a queried event/state in the portrayed event sequence may appear subsequent to the queried event/state in the text. To see the effects of this, identify the causal relations in the following example:

(138)
a. The camp counselor was roaming outside the mess hall
b. when he heard discordant sounds coming from inside.
c. He strode inside the mess hall.
d. The counselor was angry
e. when he found the children fighting.

Your responses to the causal questions should have been as follows:

(138)

a. Are there prior event/states that caused the counselor to roam? No, so a dash is entered in unit (a)'s "cause" column.

b. Are there prior event/states that caused the discordant sounds? Yes, the children's fighting (e) caused the discordant sounds. So an "e" is entered in unit (b)'s cause column. Notice that although the fighting (e) appears in the text after the discordant sounds (b), in the portrayed event sequence the fighting precedes and causes the sounds.

c. Are there prior event/states that caused the counselor to go into the mess hall? Yes, hearing the discordant sounds (b) caused it. Thus a "b" is entered in unit (c)'s cause column.

d. Are there prior event/states that caused the counselor to get angry? Yes, the fighting (e) caused it. Thus an "e" is entered in unit (d)'s "cause" column. Notice that here again is a cause that appears after the caused unit in the text though before the portrayed event in the portrayed event sequence.

e. Is there a prior cause of the fighting? No, so a dash is entered in unit (e)'s "cause" column.

5.0 CLASSIFYING UNITS

Now that the content units, and their connecting relations have been identified, the units can be classified as central, supportive or distracting. central content is that which comprises the skeletal plot of the story. supportive content fleshes out the skeletal plot with detail and repetitions that clarify, amplify, or highlight the central content. distracting content is composed of "dead-end" event sequences that are not part of the skeletal plot.

The classification of content units as central, supportive or distracting is done in two steps. First central content is identified, then the remaining noncentral units are classified as either supportive or distracting. Each of these steps will be discussed in turn.

5.1 Identifying Central Content

There are two steps to identifying central content units. The first step involves classifying connected units (.i.e., units with an entry in one of their relation columns) as either central or noncentral. The second step involves identifying the unconnected units that are central. Each of these steps will be described in turn.

5.1.1 Connected Units - The general strategy for identifying central connected units involves starting at the end of the story and identifying the sequence of purposefully and causally connected event/states that takes the reader through the story; the specific algorithm for doing this is:

1. Identify the Last Central Unit

   If the last (or next) unit:

   a. Has no entries in any of its relation columns, OR

   b. Is an overt action with an entry in its component column, OR

   c. Is a part of speech or thought that is not judged as portraying part of the gist of the speech or thought, THEN

   begin the procedure again at # 1 with the next prior unit. Otherwise, classify the unit as central and begin the procedure again at # 2 with the newly classified unit.

2. Advance from Unconnected Units

If the last unit identified as central (called here "old") has no entries in any of its relation columns the procedure is begun again at # 1 with the next unclassified unit. Otherwise go to # 3. (Obviously, if this is the beginning of the story you have finished and should stop.)

3. Check for Summary Events

If the old unit portrays overt behavior and has any entries in its component column, those entries are classified as central and the procedure begun again at # 2 with each of the newly classified units. Otherwise, go to # 4.

4. Check for Purposes

If the old unit has any entries in its purpose column, those entries are classified as central and the procedure begun again at # 2 with each of the newly classified units. Otherwise go to # 5.

5. Check for Causes and Disruptions

If the old unit has entries in either its cause or disruption columns, those entries are classified as central, and the procedure begun again at # 2 with each of the newly classified units. Otherwise, go to #6.

6. Check for Enablements

If the old unit has any entries in its enable column, those entries are classified as central and the procedure begun again at # 2 with each of the newly classified units. If there are no entries in the old unit's enable column, a mistake has been made and the algorithm should be started over again.

In order to see how this algorithm works, consider the following example for which the relations have been identified:

(139)

UNIT	TEXT	M	P	C	D	E
a.	Homer lived on a farm.	-	-	-	-	-
b.	Every morning he milked the cows.	-	-	-	-	-
c.	One day Homer went to the pond	-	-	-	-	-
d.	and met his friend Ben.	-	c	-	-	-
e.	The boys cut some logs	f	-	-	-	-
f.	and they built a raft.	-	d	-	-	-
g.	As they were finishing,	f	-	-	-	-

h.	Homer's older sister came down the path	-	-	-	f	-
i.	and yelled, "Homer, get up to the house	j	-	-	-	-
j.	and milk those cows!"	-	h	-	-	-
k.	"Oh all right," Homer yelled back.	l	-	-	-	-
l.	So Homer started up toward the barn.	-	-	j	-	-
m.	Ben followed him.	-	-	j	-	-
n.	They got pails and stools from the shed	p	-	-	-	-
o.	and began to milk the cows.	p	-	-	-	-
p.	They each milked six cows.	-	l,m	-	-	-
q.	They brought the milk to the house	p	-	-	-	-
r.	and then they headed back to the pond.	-	q	-	-	-
s.	When they finished the raft,	f	-	-	-	-
t.	they boarded it	u	-	-	-	-
u.	and floated out to the middle of the pond	-	f	-	-	-
v.	After they had drifted for a while,	u	-	-	-	-
w.	they went to shore.	y	-	-	-	-
x.	Then using their lunch as bait,	y	-	-	-	-
y.	they started to fish	-	-	u	-	-
z.	and caught two bullheads.	-	y	-	-	-
m-1	[They went back home]	-	z	-	-	-
aa.	They cooked the fish at home.	-	ml	-	-	-

The results of applying the algorithm to this example is given below. Units classified as central are designated by a "C" written next to their unit number (letter).

(139)

UNIT	CEN	TEXT	M	P	C	D	E
a.		Homer lived on a farm.	-	-	-	-	-
b.		Every morning he milked the cows.	-	-	-	-	-
c.	C	One day Homer went to the pond.	-	-	-	-	-
d.	C	and met his friend Ben.	-	c	-	-	-
e.		The boys cut some logs	f	-	-	-	-
f.	C	and built a raft.	-	d	-	-	-
g.		As they were finishing,	f	-	-	-	-
h.		Homer's older sister came down the path	-	-	-	f	-
i.		and yelled, "Homer, get up to the house	j	-	-	-	-
j.		and milk those cows!"	-	h	-	-	-
k.		"Oh all right," Homer yelled back.	l	-	-	-	-
l.		So Homer started up toward the barn.	-	-	j	-	-
m.		Ben followed him.	-	-	j	-	-
n.		They got pails and stools from the shed	p	-	-	-	-
o.		and began to milk the cows.	p	-	-	-	-
p.		They each milked six cows.	-	l,m	-	-	-
q.		They brought the milk to the house	p	-	-	-	-
r.		and then they headed back to the pond.	-	q	-	-	-
s.		When they finished the raft,	f	-	-	-	-
t.		they boarded it	u	-	-	-	-
u.	C	and floated out to the middle of the pond	-	f	-	-	-

v.		After they had drifted for a while,	u	-	-	-	-
w.		they went to shore.	y	-	-	-	-
x.		Then using their lunch as bait,	y	-	-	-	-
y.	C	they started to fish	-	-	u	-	-
z.	C	and caught two bullheads.	-	y	-	-	-
m-1	C	[They went back home]	-	z	-	-	-
aa.	C	They cooked the fish at home.	-	m1	-	-	-

The central content identified in this example was identified by applying the algorithm in the following manner: First the last central unit is identified. In our example the first candidate for this is unit (aa), the last unit of the story. This unit does have an entry in one of its relation columns (step 1a); Therefore unit (aa) is classified as central and the algorithm continues with this newly classified unit at step 2. Unit (aa) does have entries in its relation columns (step 2), therefore, the process continues with this 'old' unit (aa) at step 3.

Unit (aa) does not have any entries in its component column (step 3), so the process continues with step 4. Unit (aa) does have entries in its purpose column, (m-1). Therefore,(m-1) [missing event 1] is classified central and the procedure is begun again with this newly classified unit (m-1) at step 2.

Unit (m-1) does have an entry in its relation column (step 2); it does not have an entry in either its component column (step 3) or its purpose column (step 4). It does, however, have an entry (z) in its cause column (step 5). Therefore, unit (z) is classified as central and the process begun again with this newly classified unit (z) at step 2.

Unit (z) has an entry in one of its relations columns (step 2); does not have an entry in its component column (step 3); but does have an entry (y) in its purpose column (step 4). Therefore (y) is classified as central and the process continues with unit (y) at step 2.

Unit (y) does have an entry in one of its relation columns (step 2); it does not have an entry in its component column (step 3); or its purpose column (step 4); but does have an entry in its cause column (u), (step 5). Therefore, unit (u) is classified as central and the process begins at step 2 with the newly classified unit (u).

Unit (u) does have an entry in one of its relation columns (step 2); it does not have an entry in its component column (step 3); but does have an entry (f) in its purpose column (step 4). Therefore, unit (f) is classified as central and the process begun again at step 2 with the newly classified unit, (f).

Unit (f) has an entry in one of its relation columns (step 2); it does not have an entry in its component column (step 3); but does have an entry (d) in its purpose column (step 4). Therefore, unit (d) is as central and the process is begun again with unit (d) at step 2.

Unit (d) does have an entry in one of its relation columns (step 2); it does not have an entry in its component column (step 3); but it does have an entry (c) in its purpose column (step 4). Therefore, unit (c) is classified as central and the process is begun again with unit (c) at step 2.

Unit (c) does not have any entries in its relations columns (step 2), so the process begins again with the next prior unit, (b) at step 1.

Unit (b) has no enties in any of its relation columns, so the process begins again at step 1 with unit (a), the next prior unit.

Unit (a) has no entries in any of its relation columns, so the process begins again with the next prior unit. In this case, there is no prior unit, and thus the algorithm is completed.

5.1.2 Unconnected Units - The second step in classifying units as central or noncentral involves identifying the unconnected units that are central. The only unconnected units that are classified as central are those that introduce main characters. In example (139), the only instance of this is unit (a) which introduces the main character Homer.

5.2 Classifying Noncentral Content

Once the units have been classified as central and noncentral, the noncentral units are further classified as either supportive or distracting. To do this:

1. The central content of the story is divided into episodes.
2. Non-central content within each episode is classified as supportive or distracting.

Each of these steps will be described in turn.

5.2.1 Central Episodes - Identifying episodes involves identifying the transitions from one episode to the next. That is, it is a problem of identifying episode boundaries.

Episode boundaries are identified on the basis of whether there is goal shift within the central connected units by asking: Was this central event/state performed in order to bring about the next central event/state? If not, that next unit marks a shift in a goal.

There are, however, two exceptions to this rule. First, a shift from a setting-like statement to a character action is not considered to be a goal shift. Second, a shift from an occurrence or action that follows setting statements to a reaction that is initiated by the occurrence or action is not considered to be a goal shift that marks an episode boundary.

To see how this goal shift questions works, consider the central connected units from example (139).

(139)

c. One day Homer went to the pond
d. and met his friend, Ben.
f. so the boys built a raft.
u. They floated out to the middle of the pond.
y. They started to fish
z. and caught two bullheads.
m-1. [They went back home]
aa. and cooked the fish at home.

The results of applying the goal shift question to this example is given below. Episode boundaries are marked by a line (~~~).

(139)

c. One day Homer went to the pond
d. and met his friend, Ben.
f. so the boys built a raft.
u. They floated out to the middle of the pond.
~~~
~~~

d. Did Homer meet Ben at the pond (d) in order to build a raft (f)? Yes, so no episode boundary is identified.

f. Did the boys build a raft (f) in order to float out in the pond (u)? Probably, so no episode boundary is identified.

u. Did the boys float in the pond (u) in order to fish (y)? Probably not. Since no setting or initiating event is involved, an episode boundary is marked between units (u) and (y).

y. Did the boys fish (y) in order to catch something (a). Probably, so no episode boundary is identified.

z. Did the boys catch the fish (z) in order to leave (m-1)? [A less confusing way to ask the question in this case is, "Did the boys intend to leave after they had caught something?] Yes, so no episode boundary is identified.

aa. Did the boys go back home in order to cook the fish? Yes, so no episode boundary is identified.

5.2.2 Supportive And Distracting Content - The episodes just identified are used to classify noncentral units as either supportive or distracting. To do this, the following algorithm is used:

1. Check for the Beginning of a Distracting Sequence

   If the current unit is an action that marks a shift in goal, or the introduction of a new goal, that cannot be considered part of the overall goal defining the episode containing the closest previous central unit, classify it as distracting and continue the algorithm with the next noncentral unit at step # 4. Otherwise, go to step # 2.

2. Check for Supportive Units

   If the current unit:

   a. causes, enables, or disrupts a subsequent central unit; OR
   b. describes the plan or goal of central content; OR
   c. is not an action and is caused by or is the purpose of a central or supportive unit, OR
   d. is a component of a central or supportive unit, OR
   e. is an unconnected unit describing the setting of central or supportive content or their characters, OR

f. is an unconnected introducing a character appearing in a central episode, THEN

classify the unit as supportive and continue the algorithm with the next noncentral unit at step # 1. Otherwise go to step # 3.

3. Check for the ending of the distracting sequence.

If there is a central unit between the current unit and the last identified distracting unit the last identified, go to step # 1. Otherwise, classify the unit as distracting and continue the algorithm with the next noncentral unit at step # 2.

4. Check for Remaining Distracting Content

If the unit has not been classified yet, it is distracting. To make sure a mistake has not been made, the unit should fit into one of the following categories:

a. Enables or causes a distracting unit
b. Describes the setting of a distracting sequence
c. Introduces a minor character who doesn't appear in a central episode.

After checking that the unit fits into one of these categories, classify the unit as distracting and continue the algorithm with the next noncentral unit at step # 2.

To see how this algorithm works, consider example (139) as analyzed thus far:

(139)

UNIT	CEN	TEXT	M	P	C	D	E
a.	C	Homer lived on a farm.	-	-	-	-	-
b.		Every morning he milked the cows.	-	-	-	-	-
c.	C	One day Homer went to the pond.	-	-	-	-	-
d.	C	and met his friend Ben.	-	c	-	-	-
e.		The boys cut some logs	f	-	-	-	-
f.	C	and built a raft.	-	d	-	-	-
g.		As they were finishing,	f	-	-	-	-
h.		Homer's older sister came down the path	-	-	-	f	-
i.		and yelled, "Homer, get up to the house	j	-	-	-	-
j.		and milk those cows!"	-	h	-	-	-
k.		"Oh all right," Homer yelled back.	l	-	-	-	-
l.		So Homer started up toward the barn.	-	-	j	-	-
m.		Ben followed him.	-	-	j	-	-
n.		They got pails and stools from the shed	p	-	-	-	-
o.		and began to milk the cows.	p	-	-	-	-
p.		They each milked six cows.	-	l,m	-	-	-
q.		They brought the milk to the house	p	-	-	-	-

r.		and then they headed back to the pond.	-	q	-	-	-
s.		When they finished the raft,	f	-	-	-	-
t.		they boarded it	u	-	-	-	-
u.	C	and floated out to the middle of the pond	-	f	-	-	-
v.		After they had drifted for a while,	u	-	-	-	-
w.		they went to shore.	y	-	-	-	-
x.		Then using their lunch as bait,	y	-	-	-	-
y.	C	they started to fish	-	-	u	-	-
z.	C	and caught two bullheads.	-	y	-	-	-
m-1	C	[They went back home]	-	z	-	-	-
aa.	C	They cooked the fish at home.	-	m1	-	-	-

The results of applying this algorithm to example (139) is given below:

(139)

UNIT	CEN	TEXT	M	P	C	D	E
a.	C	Homer lived on a farm.	-	-	-	-	-
b.	S	Every morning he milked the cows.	-	-	-	-	-
c.	C	One day Homer went to the pond	-	-	-	-	-
d.	C	and met his friend Ben.	-	c	-	-	-
e.	S	The boys cut some logs	f	-	-	-	-
f.	C	so they built a raft.	-	d	-	-	-
g.	S	As they were finishing,	f	-	-	-	-
h.	D	Homer's older sister came down the path	-	-	-	f	-
i.	D	and yelled, "Homer, get up to the house	j	-	-	-	-
j.	D	and milk those cows!"	-	h	-	-	-
k.	D	"Oh all right," Homer yelled back.	l	-	-	-	-
l.	D	So Homer started up toward the barn.	-	-	j	-	-
m.	D	Ben followed him.	-	-	j	-	-
n.	D	They got pails and stools from the shed	p	-	-	-	-
o.	D	and began to milk the cows.	p	-	-	-	-
p.	D	They each milked six cows.	-	l,m	-	-	-
q.	D	They brought the milk to the house	p	-	-	-	-
r.	D	and then they headed back to the pond.	-	q	-	-	-
s.	S	When they finished the raft,	f	-	-	-	-
t.	S	they boarded it.	u	-	-	-	-
u.	C	and floated out to the middle of the pond.	-	f	-	-	-
v.	S	After they had drifted for awhile	u	-	-	-	-
w.	S	they went to shore.	y	-	-	-	-
x.	S	Then using their lunch as bait,	y	-	-	-	-
y.	C	they started to fish	-	-	u	-	-
m-1	C	[They went back home]	-	z	-	-	-
aa.	C	They cooked the fish at home.	-	m1	-	-	-

The supportive and distracting units were identified in the following manner:

(139)

b. The habit of milking the cows every day is not an action (step 1), but does describe the main character, Homer (step 2). Therefore, unit (b) is classified as supportive, and the algorithm is continued with unit (e) at step # 1.

e. Cutting the logs does not mark a shift in goal for the raft building episode (step 1), but it is a component of the central unit of building a raft (step 2). Therefore unit (e) is classified as supportive and the algorithm is continued with unit (g) at step # 1.

g. The restatement of finishing the raft does not mark a shift in goal from the first central episode of building a raft (step 1), but it does describe central content unit (f). Therefore, unit (g) is classified as supportive and the algorithm is continued with unit (h) at step # 1.

h. Homer's sister coming down the hill does mark a shift in goal from the raft-building episode. Therefore, unit (h) is classified as distracting and the algorithm is continued with unit (i) at step # 2.

i. Units (i-r) do not enable, cause, describe, nor are they components of central or supportive content (step 2). They are not separated from the previous distracting units by a central unit (step 4). Therefore, units (i-r) are all classified as distracting and the algorithm is continued with unit (s) at step # 2.

s. Finishing the raft is a redescription of central unit (f) (step #2). Therefore, unit (s) is classified as supportive, and the algorithm is continued with unit (t) at step # 1.

t. Boarding the raft does not mark a shift in goal from the first central episode of building a raft (step # 1), but it is a component of central unit (u) (step # 2). Therefore, unit (t) is classified as supportive and the algorithm continues with unit v at step # 1.

v. Drifting does not mark a shift from the first central episode of building a raft (step # 1), but it does describe central unit (u) (step # 2). Therefore, unit (v) is classified as supportive, and the algorithm is continued with unit (w) at step # 1.

w. Returning to shore does not mark a shift from the second central episode of fishing (step # 1), but it is a component of central content unit (y) (step # 2). Therefore, unit (w) is classified as supportive and the algorithm is continued with unit (x) at step # 1.

x. Using their lunch as bait does not mark a shift from the second central episode of fishing (step # 1), but it is a component of central unit (y) (step # 2). Therefore, unit (y) is classified as supportive.

6.0 DIVIDING CONTENT UNITS INTO SUBUNITS

You have now completed the procedure for identifying central, supportive and distracting content contained in narratives. For some applications, it is also useful to further divide content units identified by this analysis into subunits that portray the components and modifiers of events and states. Dividing a content unit into subunits consists of two steps:

1. The gist of the portrayed event or state is identified as a subunit.
2. The remaining event/state, components, adjectives, adverbs, conjunctions, and phrases are identified as subunits.

6.1 Identifying The Gist Subunit

The gist subunit of a unit portrays the gist of the event or state. It contains the main predicate of the unit and its "obligatory" arguments. The nature of the obligatory arguments varies with the type of event or state portrayed. The events and states we will consider are overt actions, occurrences, perceived events, speech, thought, knowledge states, physical states, emotions, traits, desires, and preferences.

6.1.1 Overt Actions - The gist of overt actions is the execution of the action or occurrence. It consists of the main verb and who "performed" the event (agent). If present, it also contains who or what it was performed on (recipient), the destination of the event, or if the destination is absent, the source or starting point. Consider the following examples:

(140) John knocked savagely at the locked door.

(141) Nick hit the wet ball from the tree to Bill.

(142) Yesterday, Jane left the house in a hurry.

The gist of (140) is "John knocked ... at the door." It contains the verb portraying the action (knocked), who performed the action (John), and the object acted upon (at the door).

The gist of (141) is "Nick hit the ... ball to Bill". It contains the verb portraying the action (hit), who performed the action (Nick), the object acted upon (the ball), and the object's destination (to Bill). Notice here that although both the source (from the tree) and destination (to Bill) are portrayed, only the destination is included in the gist subunit.

The gist of (142) is "Jane left the house". It contains the verb portraying the action (left), who performed the action (Jane), and the action's source (the house). Notice here that since no destination is portrayed, the source is included in the gist subunit.

When the agent, verb, recipient, destination (or source) of an overt action is portrayed by a noun clause (see section 1.4.2), it is still included as part of the gist subunit. This is true for the gist subunit of any event or state. Consider the following examples:

(143) The boys finished what they were doing.

(144) Whoever gets done first waters the garden.

(145) The woman gave the lad what he wanted.

Each of these examples contain a noun clause which has been underlined. Nonetheless, each example portrays only a gist subunit.

6.1.2 Occurrences - Occurrences are portrayals of inanimate events caused by natural forces. The gist of occurrences, like overt actions, is the execution of the event. It consists of the same components that the gist of overt actions consists of: the verb portraying the event, what "performed" the event, who or what the event acted upon, and the event's destination (or its source if no destination is specified). Consider the following examples:

(146) Suddenly, the wind tore through the thatched huts in the village.

(147) The mossy boulder rolled down the hill to the river.

The gist of (146) is "the ... wind tore through the ... huts." It contains the verb portraying the occurrence (tore), what "performed" the occurrence, (the wind), and the objects acted upon (the huts).

The gist of (147) is "The ... boulder rolled ... to the river". It contains the verb portraying the occurrence (rolled), what was acted upon (the rock), and the destination of the occurrence (to the river).

6.1.3 Perceived Events - Occurrences, and overt actions that are perceived by another character, are treated differently from those already introduced. Consider the following examples:

(148) Sue heard the lamp fall.

(149) George saw Sam leave the house.

The gist of (148) is "the lamp fall". It includes the verb portraying the occurrence (fall), and the object involved (the lamp), but does not include Sue's perception of the occurrence (Sue heard). Similarly, the gist of (149) is "Sam leave the house". It contains the verb portraying the action (leave), who performed the action (Sam) and the

source of the action (the house). It does not include George's perception of the action (George saw).

6.1.4 Speech, Thought, And Knowledge States - The gist of speech (what a person says), thought (what a person thinks), and knowledge states, (what a person knows) is not the execution of the event, such as "He said", "He thought", or "He knew", rather the content of what is said or known is the event or state.[1] Consider the following:

(150) Karen knew that Bob found the old, rusty ring.

(151) Yesterday, Mark said, "Bozo deftly jumped from the porch!"

The gist of (150) is "Bob found the ... ring" because "Bob found the old rusty ring" is what Karen knew and the gist of this expressed event is "Bob found the ... ring". Thus, once the event or state comprising the content of the speech or knowledge state has been identified, the gist of the event or state is identified like any other event or state.

The gist of (151) is "Bozo ... jumped from the porch. Bozo's jumping is the event described by Mark. The gist of this event contains the verb portraying the action (jumped), who performed the action (Bozo), and the source of the action (from the porch).

6.1.5 Physical States, Emotions And Traits - The gist of physical states, emotions, and traits consists of the verb portraying how the state, emotion or trait is manifested (e.g., smelled, looked, was), the nature of the state, emotion, or trait (e.g., sweet, happy, mean), and the object or person possessing the state, emotion, or trait. Consider the following examples:

(152) The artificial roses did not smell very sweet.

(153) The old, smelly hag appeared to be happy.

(154) Whoever bought that old farm was rather wise.

The gist of (152) is "The ... roses did not smell ... sweet". It contains the verb portraying how the state is manifested (did ... smell), the nature of the state (not ... sweet), and the object possessing the state (the roses).

The gist of (153) is "The ... hag appeared to be happy". It contains the verb portraying how the emotion is manifested (appeared to be), the nature of the emotion (happy), and the person possessing the emotion (the hag).

The gist of (154) is "whoever bought that ... farm was ... wise". It contains the verb portraying how the trait is manifested (was), the nature of the trait (wise), and who possesses the trait (whoever bought that farm).

6.1.6 Desires And Preferences - the gist of desires and preferences consists of the verb portraying the type of desire, the object desired, and the character desiring, or possessing the preference for, the object. Consider the following examples:

(155) I like fires in the winter.

(156) Old Mr. Toad wanted to eat the foolish green flies.

The gist of (155) is "I like fires". It contains the verb portraying the type of preference (like), the object that is preferred (fires), and the character who has the preference (I). The gist of (156) is "Mr. Toad wanted to eat ... the flies". It contains the verb portraying the desire (wanted), the object desired (to eat ... the flies), and the character

with the desire (Mr. Toad). Notice that objects of preferences and desires can be an entire event (e.g., to eat the flies). When this occurs, only the arguments that would appear in the gist of the event is included in the object.

6.2 Identifying Nongist Subunits

Once the gist has been determined all remaining arguments are considered subunits. These include:

1. Locative and temporal phrases
2. Remaining components of events and states
3. Adjectives and adverbs
4. Phrases that identify nouns (restrictive adjective clauses)
5. Conjunctions

Each of these will be discussed in turn.

6.2.1 Locative Phrases - Locative phrases describe the location in which an event occurs or the location of the person or object possessing a state. Temporal phrases describe the time at which an event occurs or a state exists. Consider the following examples:

(157) One day Frank went to the store.

(158) Tom made soup in the kitchen.

(159) Mary Lou was cold yesterday.

The gist of (157) is "Frank went to the store". "One day" is a temporal phrase that comprises a nongist subunit. The gist of (158) is "Tom made soup". "In the kitchen" is a locative phrase that comprises a nongist subunit. The gist of (159) is "Mary Lou was cold". "Yesterday" is a temporal phrase that comprises a nongist subunit.

In order to distinguish subunits from each other, each content is rewritten by placing the gist of the unit on the first line, and each remaining subunit below it. This has been done for examples (157-159) below.

(157) Frank went to the store.
One day

(158) Tom made soup
in the kitchen

(159) Mary Lou was cold
yesterday.

Some may find the difference between the destination of an action, which is part of the gist and locative phrases, which are not, somewhat confusing. Consider the following examples.

(160) George led the horse to the barn.

(161) George washed the horse in the barn.

In example (160), "to the barn" is the destination of George's leading. Consequently (160) contains only one subunit. In example (163), "in the barn" is the location of George's washing. Consequently, two subunits are identified. An easy test for whether the description of location forms a distinct subunit is whether the locative phrase can be put at the opposite end of the sentence without making the sentence sound awkward. For example:

(160) To the barn, George led the horse.

(161) In the barn, George washed the horse.

Example (160)' sounds like awkward and consequently, "to the barn" does not form a distinct subunit. Example (161)', on the other hand, sounds fine, and consequently "in the barn" forms a distinct subunit.

6.2.2 Remaining Components Of Event/States - The remaining components of event/states include further descriptions of the event/states. These components include the following:

1. Manner of actions
2. Instruments
3. Range of stable states
4. Object of transitory states
5. Perception of events and states
6. Execution of speech and knowledge states
7. Aim of actions
8. Beneficiaries

Each of these types of subunits will be discussed in turn.

6.2.2.1 Manner Of Actions - The manner of actions refers to words and phrases that do not contain a verb, yet portray actions or emotions that accompany an event/state portrayed in the gist subunit. Consider the following examples:

(162) With a smile Bob placed the ring on her finger.

(163) Marty said good-bye with tears in his eyes.

In example (162), the gist is "Bob placed the ring". The phrase, "with a smile" describes the manner in which the action (placing) is performed and comprises a distinct subunit. In the example (163), the gist is "Marty said good-bye". The phrase "with tears in his eyes" describes the way in which Marty performed the action (manner of action) and comprises a distinct subunit. Thus examples (162) and (163) would be analyzed as follows:

(162)' Bob placed the ring on her finger.
With a smile

(163)' Marty said good-bye
with tears in his eyes.

6.2.2.2 Instruments - Instruments are objects that characters use to execute actions. Consider the following:

(164) Perch hit Horace with the bat.

(165) Mary dug the trench with the hoe.

(166) Wallace opened the window with a crow bar.

In example (164), "Percy hit Horace" is the gist subunit. The phrase "with the bat" is the instrument used to execute the action and comprises a distinct subunit. In example (165), "Mary dug the trench" is the gist subunit. The phrase "with the hoe" is the instrument used to execute the action component and comprises a distinct subunit. In example (166), "Wallace opened the window" is the gist subunit. The phrase "with a crowbar" is the instrument used to execute the action and therefore comprises a distinct subunit.

6.2.2.3 Range Of Traits And Habits - Ranges of traits and habits portray the circumstances in which a trait or habit of a character exists or occurs. Consider the following examples:

(167) Ben is gentle around horses.

(168) My teacher gives tests on Fridays.

In example (167), "Ben is gentle" is the gist subunit. The phrase "around horses" is the range of this trait describing when Ben is gentle. As a result, "around horses" comprises a distinct subunit. The gist of example (168) is "My teacher gives tests". The phrase "on Fridays" is the range of this habit describing when the teacher gives tests. As a result, "on Fridays" comprises a distinct subunit. Thus examples (167) and (168) would be analyzed as follows:

(167) Ben is gentle
around horses.

(168) My teacher gives tests
on Fridays

6.2.2.4 Objects Of Emotions - Objects of emotions are the object or event about which the emotion is concerned. Consider the following examples:

(169) Jane was angry at Tom.

(170) Tom was afraid of being attacked.

(171) George was afraid of being attacked at night by dogs.

In example (169), the gist is "Jane was angry." The phrase "at Tom" is the object of Jane's anger and comprises a nongist subunit. In example (170), the gist is "Tom was afraid". The phrase "of being attacked" is the object of Tom's fright and comprises a nongist subunit. In example (171), the gist is "George was afraid". The phrase "of being attacked ... by dogs" is the object of George's fright and comprises a nongist subunit. Notice that when the object of an emotion is an event, only the arguments that would have been included in the gist of that event are included as the object. Thus the temporal phrase "at night" comprises a second nongist subunit. In practice, examples (169-171) would be analyzed in the following manner:

(169) Jane was angry
at Tom.

(170) Tom was afraid
of being attacked.

(171) George was afraid
of being attacked ... by dogs.
at night

6.2.2.5 Perception Of Event/States - As described earlier, the perception of events and states describes the hearing or seeing of an event or state by another character. Consider the following examples:

(172) Sally noticed that the fish was dead.

(173) Pam watched the cloud come up over the valley.

In example (172), the gist subunit is "the fish was dead." The phrase "Sally noticed that" portrays Sally's perception of this state and comprises a nongist subunit. In example (173), the gist subunit is "the cloud come up over the valley." The phrase "Pam watched" describes Pam's perception of this event and comprises a nongist subunit. Thus examples (172-173) would be analyzed in the following manner:

(172) the fish was dead
Sally noticed that

(173) the cloud come up over the valley.
Pam watched.

6.2.2.6 Execution Of Speech, Thought, And Knowledge States - As previously described, the execution of speech, thought and knowledge states is the particular act performed in speaking, thinking, or knowing. Consider the following examples:

(174) Jack remarked, "I hate eating this food."

(175) Henry knew that Jack hated the beans.

In example (174), the gist subunit is "I hate eating this food." The phrase "Jack remarked" is the execution of this speech and comprises a nongist subunit. In example (175), the gist subunit is "Jack hated the beans". The phrase "Henry knew that" is the "execution" or type of knowledge and comprises a nongist subunit. Thus, examples (174) and (175)

would be analyzed in the following manner:

(174) "I hate eating this food."
Jack remarked,

(175) Jack hated the beans.
Henry knew that

6.2.2.7 Aim Of Actions - The aim of an action is the purpose for which it was executed. Consider the following examples:

(176) Henry left the house to go to the store.

(177) Yesterday, George sang to get attention.

In example (176), the gist subunit is "Henry left the house". The phrase "to go to the store" is the aim of the action and constitutes a nongist subunit. In example (177), the gist subunit is "George sang". The phrase "to get attention" is the aim of the action and comprises a nongist subunit. The phrase "Yesterday" is a temporal phrase that comprises a second nongist subunit. Examples (176) and (177) would be analyzed in the following manner:

(176) Henry left the house
to go to the store.

(177) George sang
Yesterday
to get attention.

6.2.2.8 Beneficiaries - Beneficiaries are people for whom an action is performed. Consider the following examples:

(178) Mary baked a cake for Marie.

(179) In the park, the woman put some bread under the trees for the birds.

In example (178), the gist subunit is "Mary baked a cake." The phrase "for Marie" is the beneficiary for whom the baking was done and comprises a nongist subunit. In example (179), the gist subunit is "the woman put some bread under the trees". The phrase "for the birds" is the beneficiary for whom the action was done and comprises a nongist subunit. The phrase "In the park" is a locative phrase that comprises a second nongist subunit. Examples (178) and (179) would be analyzed in the following manner:

(178) Mary baked a cake
for Marie.

(179) the woman put some bread under the trees
In the park,
for the birds.

6.2.3 Adjectives And Adverbs - Also considered as separate subunits, and not part of the gist subunit are any modifiers of nouns or verbs. Consider the following examples:

(180) Paul angrily washed the dishes.

(181) The red dress faded in the washer.

(182) The young boys stole the new car in the middle of the night.

In example (180), the gist subunit is "Paul ... washed the dishes". The word "angrily" is an adverb describing how the dishes were washed and comprises a nongist subunit. In example (181), the gist subunit is "The ... dress faded in the washer". The word "red" is an adjective describing the dress and comprises a nongist subunit. In example (182), the gist subunit is "The ... boys stole the ... car". The word "young" is an adjective describing the boys and comprises a nongist subunit. The word "new" is an adjective describing the car and comprises a second

nongist subunit. The phrase "in the middle of the night" is a temporal phrase and comprises a thrid nongist subunit. Examples (180-182) are thus analyzed in the following manner:

(180) Paul ... washed the dishes.
angrily

(181) The ... dress faded in the washer.
red

(182) The ... boys stole the ... car
young
new
in the middle of the night.

6.2.4 Restrictive Clauses And Phrases - Restrictive clauses and phrases identify a noun. Consider the following examples:

(183) He took all the chalk that was broken

(184) and put it in his jacket pocket that didn't have a hole.

In example (183), the gist subunit is "He took all the chalk". The phrase "that was broken" is a restrictive clause that identifies which chalk was taken and comprises and nongist subunit. In example (184),, the gist subunit is "and put it is his ... pocket". The phrase "that didn't have a hole" is a restrictive clause that identifies which pocket the chalk was put in and comprises a nongist subunit. The word "jacket" is an adjective describing the pocket and comprises a second nongist subunit. Thus, examples (183) and (184) are analyzed in the following manner:

(183) He took all the chalk
that was broken.

(184) and put it in his ... pocket
jacket
that didn't have a hole.

6.2.5 Conjunctions - The final type of subunits are conjunctions. Only conjunctions that connect different content units comprise distinct subunits. However, the conjunctions "and" and "then" never comprise distinct subunits. Consider the following content units:

(185) Jack laughed

(186) because Jill was standing on her head

(187) and singing a song.

In example (185), the gist subunit is "Jack laughed". It contains no other subunits. In example (186), the gist subunit is "Jill was standing on her head". The word "because" is a conjunction connecting unit (185) and (186) and comprises a nongist subunit. In example (187), the gist subunit is "and singing a song." It contains no other subunits since the conjunction "and" never comprises a distinct subunit. Thus, examples (185-187) are analyzed in the following manner:

(185) Jack laughed

(186) Jill was standing on her head
because

(187) and singing a song

As an exercise, rewrite on a separate sheet of paper the subunits of the following examples:

(188) Alone, a little pronghorn lay waiting in the brush.

(189) Far away, his frightened mother ran across the open country

(190) because a coyote was running after her.

(191) The little pronghorn knew his mother would come back

(192) but he was afraid of being left alone

(193) and wanted to be comforted by his mother right away.

These examples should have been analyzed in the following manner:

(188) a ... pronghorn ... lay ... in the brush.
Alone
little
waiting

(189) his should there be ... here? mother ran across the ... country
Far away
frightened
open

(190) a coyote was running after her.
because

(191) his mother would come back
The ... pronghorn knew
little

(192) he was afraid
but
of being left alone

(193) and wanted to be comforted by his mother
right away.

7.0 AN EXTENDED EXAMPLE

In this final section, we will present the entire analysis of a story adapted from a nongist grade reader (Clymer & Martin, 1976). The story is entitled "The Raccoon and Mrs. McGinnis." The story will be presented in four different forms. First it will be presented in paragraph form. Next it will be broken down into content units. Then, it will be broken down into subunits. Finally, the relations and centrality classification of the content units will be presented.

7.1 The Story In Paragraphs

A little raccoon, who was almost tame, lived in an old apple tree. He had a black mask on his face and six black rings on his tail. There, in the woods by the old apple tree, was a little house where Mrs. McGinnis lived. Mrs. McGinnis had one cow and two pigs. She took armloads of hay to the cow and pails of corn to the pigs. And every night the cow and the pigs went to sleep under the apple tree. Then she put a slice of bread on the doorstep for the raccoon, and the raccoon knew that the bread was for him.

One night she was standing in front of her house, as she often did. She looked up and saw a star. "That's the first star I have seen tonight, indeed it is," she said. "I will make a wish. Indeed I will." She looked up at the star. "I wish for a little barn, so my cow and my pigs will be safe from the wind and the rain." Then she put a slice of bread on her step.

After Mrs. McGinnis had gone to bed, the raccoon came down from the tree and picked up the bread. He walked into the woods until he came to a river. Beside the river he swished the bread in the water, because that is what a raccoon often does. When the bread was wet, he ate it.

Because he was still hungry, he started to look for something more to eat. Just as he started to look, he heard something coming down the road. Two men came along on their horses. The raccoon hid in back of a tree. The men got down from their horses. "Mrs. McGinnis is not far from here," the first man said. "We will leave our horses here, and we will go to Mrs. McGinnis' house. We will go very quietly, and we will take her cow and pigs. She will not know they are gone until morning."

The men put black masks over their faces and started down the road. The raccoon followed. The men made no noise. When they reached the apple tree, they took the cow and the pigs and started back through the woods.

The little raccoon still followed. He followed quietly. Then he stepped on a small branch, and the branch broke with a CRACK. "What was that?" asked the first man. "It was nothing," said the other. "Little night animals often play here." Then a small rock rolled down the hill and into the river. It made a splash. "What was that?" asked the first man. "It was nothing," said the other. "Nothing at all." Often little fish jump and splash in the water. Everything was very still until a rabbit ran down the road. "I think someone is following us," the first man said.

The little raccoon thought he would climb a tree because there he would be safe from danger. He climbed up and looked around the tree to see where the men were. In the moonlight, only the black mask of the little raccoon could be seen. THE MEN WERE LOOKING RIGHT AT HIM.

"It is another masked bandit," said the first man. "Don't shoot." said the other. "You may take our cow and our pigs." "Take our money too," said the first man. "only please don't shoot." And as he ran to his horse, he tossed a fat moneybag to the ground. The men went off down the road as fast as their horses could go.

The raccoon climbed down and picked up the moneybag. He took it to the river and swished it in the water. The cow and the pigs started down the road that led to the little house, and the raccoon followed with the moneybag. Because he often looked on the step for bread, he went there to look. There was nothing on the step, so he dropped the moneybag and went up the tree to his bed.

In the morning Mrs. McGinnis came outside. "What is this? It is a moneybag! Indeed it is! My wish has come true! Indeed it has!" She fed the animals and watered the garden. Afterwards she called up the builders and they soon had her barn built.

7.2 The Story In Content Units

1. A little raccoon, ... lived in an old apple tree.
2. who was almost tame,
3. He had a black mask on his face
4. and six black rings on his tail.
5. There, in the woods by the old apple tree, was a little house
6. where Mrs. McGinnis lived.
7. Mrs. McGinnis had one cow and two pigs.
8. She took armloads of hay to the cow
9. and pails of corn to the pigs.
10. And every night the cow and the pigs went to sleep under the apple tree.
11. Then she put a slice of bread on the doorstep for the raccoon,
12. and the raccoon knew that the bread was for him.
13. One night she was standing in front of her house,
14. as she often did.
15. She looked up
16. and saw a star.
17. "That's the first star I have seen tonight,
18. indeed it is," she said.
19. "I will make a wish.
20. Indeed I will."
21. She looked up at the star.
22. "I wish for a little barn,
23. so my cow and my pigs will be safe from the wind and the rain."
24. Then she put a slice of bread on her step.
25. After Mrs. McGinnis had gone to bed,
26. the raccoon came down from the tree
27. and picked up the bread.
28. He walked into the woods
29. until he came to a river.
30. Beside the river he swished the bread in the water,
31. because that is what a raccoon often does.
32. When the bread was wet,
33. he ate it.
34. Because he was still hungry,
35. he started to look for something more to eat.
36. Just as he started to look,
37. he heard something coming down the road.
38. Two men came along on their horses.
39. The raccoon hid in back of a tree.
40. The men got down from their horses.
41. "Mrs. McGinnis is not far from here," the first man said.
42. "We will leave our horses here,
43. and we will go to Mrs. McGinnis' house.
44. We will go very quietly,
45. and we will take her cow and pigs.
46. She will not know they are gone until morning."
47. The men put black masks over their faces
48. and started down the road.
49. The raccoon followed.
50. The men made no noise.
51. When they reached the apple tree,

they took the cow and the pigs
and started back through the woods.
The little raccoon still followed.
He followed quietly.
Then he stepped on a small branch,
and the branch broke with a CRACK.
"What was that?" asked the first man.
"It was nothing," said the other.
"Little night animals often play here."
Then a small rock rolled down the hill and into the river.
It made a splash.
"What was that?" asked the first man.
"It was nothing," said the other.
"Nothing at all."
Often little fish jump
and splash in the water.
Everything was very still
until a rabbit ran down the road.
"I think someone is following us," the first man said.
The little raccoon thought he would climb a tree
because there he would be safe from danger.
He climbed up
and looked around the tree to see where the men were.
In the moonlight, only the black mask of the raccoon could be seen.
THE MEN WERE LOOKING RIGHT AT HIM.
"It is another masked bandit," said the first man.
"Don't shoot." said the other.
"You may take our cow and our pigs."
"Take our money too," said the first man.
"Only please don't shoot."
And as he ran to his horse,
he tossed a fat moneybag to the ground.
The men went off down the road
as fast as their horses could go.
The raccoon climbed down
and picked up the moneybag.
He took it to the river
and swished it in the water.
The cow and the pigs started down the road that led to the little house,
and the raccoon followed with the moneybag.
Because he often looked on the step for bread,
he went there to look.
There was nothing on the step,
so he dropped the moneybag
and went up the tree to his bed.
In the morning Mrs. McGinnis came outside.
"What is this?
It is a moneybag!
Indeed it is!
My wish has come true!
Indeed it has!"
She fed the animals
and watered the garden.

105. Afterwards she called up the builders
106. and they soon had her barn built.

7.3 The Story In Subunits

1. A raccoon, ... lived in an ... tree.
   little
   old
   apple

2. who was ... tame,
   almost

3. He had a ... mask on his face
   black

4. and ... rings on his tail.
   six
   black

5. There, ... was a ... house
   in the woods
   by the ... tree,
   old
   apple
   little

6. where Mrs. McGinnis lived.

7. Mrs. McGinnis had ... cow and ... pigs.
   one
   two

8. She took ... hay to the cow
   armloads of

9. and ... corn to the pigs.
   pails of

10. ... the cow and the pigs went to sleep under the ... tree.
    And every night
    apple

11. Then she put ... bread on the doorstep ...
    a slice of
    for the raccoon,

12. ... the bread was for him.
    and the raccoon knew that

13. ... she was standing in front of her house,
    One night

14. ... she ... did.
    as
    often

15. She looked up

16. and saw a star.

17. "That's the first star ...
I have seen
tonight,

18. indeed ...
it is,"
she said.

19. "I will make a wish.

20. Indeed ...
I will."

21. She looked up at the star.

22. "I wish for a little barn,

23. ... my cow and my pigs will be safe ...
so
from the wind and the rain."

24. Then she put ... bread on her step.
a slice of

25. ... Mrs. McGinnis had gone to bed,
After

26. the raccoon came down ...
from the tree

27. and picked up the bread.

28. He walked into the woods

29. ... he came to a river.
until

30. ... he swished the bread in the water,
Beside the river

31. ... that is what a raccoon ... does.
because
often

32. ... the bread was wet,
When

33. he ate it.

34. ... he was ... hungry,
Because
still

35. he started to look for something more ...
to eat.

36. ... he started to look,
Just as

37. ... something coming down the road.
he heard

38. Two men came along ...
on their horses.

39. The raccoon hid in back of a tree.

40. The men got down ...
from their horses.

41. "Mrs. McGinnis is not far from here," ...
the first man said.

42. "We will leave our horses here,

43. and we will go to Mrs. McGinnis' house.

44. We will go ... quietly,
very

45. and we will take her cow and pigs.

46. She will not know they are gone ...
until
morning."

47. The men put ... masks over their faces
black

48. and started down the road.

49. The raccoon followed.

50. The men made no noise.

51. ... they reached the ... tree,
When
apple

52. they took the cow and the pigs

53. and started back through the woods.

54. The ... raccoon ... followed.
little
still

55. He followed ...
quietly.

56. Then he stepped on a ... branch,
small

57. and the branch broke ...
with a CRACK.

58. "What was that?" ...
asked the first man.

59. "It was nothing," ...
said the other.

60. ... animals ... play here."
Little
night
often

61. Then a ... rock rolled ... into the river.
small
down the hill and

62. It made a splash.

63. "What was that?" ...
asked the first man.

64. "It was nothing," ...
said the other.

65. "Nothing at all."

66. ... fish jump
Often
little

67. and splash ...
in the water.

68. Everything was ... still
very

69. ... a rabbit ran down the road.
until

70. ... someone is following us," ...
"I think

the first man said.

71.
he would climb a tree
The ... raccoon thought
little

72. ... there he would be safe ...
because
from danger.

73. He climbed up

74. and looked around the tree ...
to see where the men were.

75. ... only the ... mask could be seen.
black
of the ... raccoon
little
In the moonlight,

76. THE MEN WERE LOOKING RIGHT AT HIM.

77. "It is ... bandit," ...
another
masked
said the first man.

78. "Don't shoot," ...
said the other.

79. "You may take our cow and our pigs."

80. "Take our money ...
too,"
said the first man.

81. ... don't shoot."
"Only
please

82. ... he ran to his horse,
And as

83. he tossed a ... moneybag to the ground.
fat

84. The men went off down the road

85. ... their horses could go.
as fast as

86. The raccoon climbed down

87. and picked up the moneybag.

88. He took it to the river

89. and swished it in the water.

90. The cow and the pigs started down the road ...
that led to the ... house,
little

91. and the raccoon followed ...
with the moneybag.

92. ... he ... looked ... for bread,
Because
often
on the step

93. he went there ...
to look.

94. There was nothing on the step,

95. ... he dropped the moneybag
so

96. and went ... to his bed.
up the tree

97. ... Mrs. McGinnis came outside.
In the morning

98. "What is this?

99. It is a moneybag!

100. Indeed ...
it is!

101. My wish has come true!

102. Indeed ...
it has!

103. She fed the animals

104. and watered the garden.

105. ... she called up the builders
Afterwards

106. and they ... had her barn built.
soon

7.4 The Story Analyzed

UNIT	CEN	TEXT	M	P	C	D	E
1.	C	A little raccoon, ... lived in an old apple tree.	-	-	-	-	-
2.	S	who was almost tame,					
3.	C	He had a black mask on his face	-	-	-	-	-
4.	S	and six black rings on his tail.	-	-	-	-	-
5.	S	There, in the woods by the old apple tree, was a little house	-	-	-	-	-
6.	C	where Mrs. McGinnis lived.	-	-	-	-	-
7.	C	Mrs. McGinnis had one cow and two pigs.	-	-	-	-	-
8.	S	She took armloads of hay to the cow	-	-	-	-	-
9.	S	and pails of corn to the pigs.	-	-	-	-	-
10.	S	And every night the cow and the pigs went to sleep under the apple tree.	-	-	-	-	-
11.	C	Then she put a slice of bread on the doorstep for the raccoon,	-	-	-	-	-
12.	C	and the raccoon knew that the bread was for him.	-	-	11	-	-
13.	C	One night she was standing in front of her house,	-	-	-	-	-
14.	S	as she often did.	13	-	-	-	-
15.	S	She looked up	16	-	-	-	-
16.	C	and saw a star.	-	-	-	-	13
17.	S	"That's the first star I have seen tonight,	16	-	-	-	-

UNIT	CEN	TEXT	M	P	C	D	E
18.	S	indeed it is," she said.	16	-	-	-	-
19.	S	"I will make a wish.	-	-	16	-	-
20.	S	Indeed I will."	19	-	-	-	-
21.	S	She looked up at the star.	22	-	-	-	-
22.	C	"I wish for a little barn,	-	-	16	-	-
23.	S	so my cow and my pigs will be safe from the wind and the rain."	22	-	-	-	-
24.	C	Then she put a slice of bread on her step.	-	-	-	-	-
25.	C	After Mrs. McGinnis had gone to bed,	-	-	-	-	-
26.	C	the raccoon came down from the tree	-	12 24 25	-	-	-
27.	C	and picked up the bread.	-	26	-	-	-
28.	S	He walked into the woods	29	-	-	-	-
29.	C	until he came to a river.	-	27	-	-	-
30.	S	Beside the river he swished the bread in the water,	33	-	-	-	-
31.	S	because that is what a raccoon often does.	-	-	-	-	-
32.	S	When the bread was wet,	33	-	-	-	-
33.	C	he ate it.	-	29	-	-	-
34.	C	Because he was still hungry,	-	-	-	33	-
35.	C	he started to look for something more to eat.	-	-	34	-	-
36.	S	Just as he started to look,	35	-	-	-	-

UNIT	CEN	TEXT	M	P	C	D	E
37.	S	he heard something coming down the road.	38	-	-	-	-
38.	C	Two men came along on their horses.	-	-	7	35	-
39.	S	The raccoon hid in back of a tree.	-	-	38	-	-
40.	S	The men got down from their horses.	48	-	-	-	-
41.	S	"Mrs. McGinnis is not far from here," the first man said.	45	-	-	-	-
42.	S	"We will leave our horses here,	45	-	-	-	-
43.	S	and we will go to Mrs. McGinnis' house.	45	-	-	-	-
44.	S	We will go very quietly,	45	-	-	-	-
45.	S	and we will take her cow and pigs.	-	-	38	-	-
46.	S	She will not know they are gone until morning."	45	-	-	-	-
47.	C	The men put black masks over their faces	-	-	-	-	-
48.	S	and started down the road.	51	-	-	-	-
49.	C	The raccoon followed.	-	-	-	-	-
50.	S	The men made no noise.	51	-	-	-	-
51.	C	When they reached the apple tree,	-	38	-	-	-
52.	C	they took the cow and the pigs	-	51	-	-	-
53.	C	and started back through the woods.	-	52	-	-	-
54.	S	The little raccoon still followed.	49	-	-	-	-

UNIT	CEN	TEXT	M	P	C	D	E
55.	S	He followed quietly.	49	-	-	-	-
56.	C	Then he stepped on a small branch,	-	-	-	-	49 53
57.	C	and the branch broke with a CRACK.	-	-	56	-	-
58.	S	"What was that?" asked the first man.	-	-	57	-	-
59.	S	"It was nothing," said the other.	-	58	-	-	-
60.	S	"Little night animals often play here."	59	-	-	-	-
61.	C	Then a small rock rolled down the hill and into the river.	-	-	-	-	-
62.	S	It made a splash.	61	-	-	-	-
63.	S	"What was that?" asked the first man.	-	61	-	-	-
64.	S	"It was nothing," said the other.	-	63	-	-	-
65.	S	"Nothing at all."	64	-	-	-	-
66.	S	Often little fish jump	64	-	-	-	-
67.	S	and splash in the water.	64	-	-	-	-
68.	S	Everything was very still	-	-	-	-	-
69.	C	until a rabbit ran down the road.	-	-	-	-	-
70.	C	"I think someone is following us" said the first man.	-	-	56 61 69	-	-
71.	S	The little raccoon thought he would climb a tree	-	-	72	-	-
72.	C	because there he would be safe from danger.	-	-	-	-	-

UNIT	CEN	TEXT	M	P	C	D	E
73.	C	He climbed up	-	-	72	-	-
74.	S	and looked around the tree to see where the men were.	-	-	-	-	73
75.	C	In the moonlight, only the black mask of the little raccoon could be seen.	-	-	-	-	3 73
76.	C	THE MEN WERE LOOKING RIGHT AT HIM.	-	-	-	-	73
77.	C	"It is another masked bandit," said the first man.	-	-	47 70 75 76	-	-
78.	C	"Don't shoot." said the other.	-	79	-	-	-
79.	C	"You may take our cow and our pigs."	-	-	75 76 77	-	-
80.	C	"Take our money too," said the first man.	-	-	75 76 77	-	-
81.	S	"Only please don't shoot."	80	-	-	-	-
82.	S	And as he ran to his horse,	83	-	-	-	-
83.	C	he tossed a fat moneybag to the ground.	-	80	-	-	-
84.	C	The men went off down the road	-	78 79	-	-	-
85.	S	as fast as their horses could go.	84	-	-	-	-
86.	C	The raccoon climbed down	-	-	83 84	-	-
87.	C	and picked up the moneybag.	-	86	-	-	-

UNIT	CEN	TEXT	M	P	C	D	E
88.	S	He took it to the river	-	87	-	-	-
89.	S	and swished it in the water.	-	88	-	-	-
90.	S	The cow and the pigs started down the road that led to the little house,	-	-	-	-	-
91.	S	and the raccoon followed with the moneybag.	-	-	-	-	-
92.	C	Because he often looked on the step for bread,	-	-	-	-	-
93.	C	he went there to look.	-	-	92	-	-
94.	C	There was nothing on the step,	-	-	-	93	-
95.	C	so he dropped the moneybag	-	-	87 94	-	-
96.	S	and went up the tree to his bed.	-	95	-	-	-
97.	C	In the morning Mrs. McGinnis came outside.	-	-	-	-	-
98.	S	"What is this?	99	-	-	-	-
99.	C	It is a moneybag!	-	-	-	-	95 97
100.	S	Indeed it is!	99	-	-	-	-
101.	C	My wish has come true!	-	-	22 99	-	-
102.	S	Indeed it has!	101	-	-	-	-
M-1.	D	Then Mrs. McGinnis started her morning chores.	-	-	-	-	-
103.	D	She fed the animals	M-1	-	-	-	-

UNIT	CEN	TEXT	M	P	C	D	E
104.	D	and watered the garden.	M-1	-	-	-	-
105.	C	Afterwards she called up the builders	-	-	99 101	-	-
106.	C	and they soon had her barn built.	-	105-	-	-	-

8.0 REFERENCES AND NOTES

Footnotes

1. There are some contexts in which both the execution and content of speech, thought, or knowledge states are included in the gist subunit. The most common of these are negations of what was said:

   - Sam didn't think it was good.
   - George didn't say he could do it.

   Other examples include contexts in which the execution is questioned or emphasized:

   - How do you know he did it?
   - He said he did it.

2. First star is considered to be a single concept.

3. Unit (31) is portrayed as a cause of unit (30). However, since unit (30) is a component of unit (33), this relation is not indicated.

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Reference Note

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